MAGNETICAL, METEOROLOGICAL, AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES, BOMBAY AND ALIBAG, 1911 to 1915.

WITH AN APPENDIX.

00133503

Presented by Order of the Right Honourable the Governor General in Council, India.

To.....

.....

.....

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OF THE
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T. K. CHINMAYANANDAM,

Director,

Bombay and Alibag Observatories.

MAGNETICAL, METEOROLOGICAL, AND SEISMOGRAPHIC OBSERVATIONS

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BOMBAY AND ALIBAG.

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1911 to 1915.

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WITH AN APPENDIX.

MAGNETICAL, METEOROLOGICAL AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES,

BOMBAY AND ALIBAG,

IN THE YEARS

1911 to 1915

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UNDER THE DIRECTION OF

N. A. F. MOOS, Esq., D.Sc., F.R.S.E.

WITH AN APPENDIX.

Printed by order of His Majesty's Government.

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BOMBAY
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	1911.		1912.		1913.		1914.		1915.	
	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.
Barometric Pressure: Daily and monthly means	I*a*	1	I*a*	16	I*a*	31	I*a*	46	I*a*	61
Barometric Pressure: Mean diurnal inequality for each month of the year and for the whole year	I*b*	1	I*b*	16	I*b*	31	I*b*	46	I*b*	61
Temperature of the Air: Daily and monthly means	II*a*	2	II*a*	17	II*a*	32	II*a*	47	II*a*	62
Temperature of the Air: Mean diurnal inequality for each month of the year and for the whole year	II*b*	2	II*b*	17	II*b*	32	II*b*	47	II*b*	62
Maximum temperature of the Air on each day during the year	II*c*	3	II*c*	18	II*c*	33	II*c*	48	II*c*	63
Minimum temperature of the Air on each day during the year	II*d*	3	II*d*	18	II*d*	33	II*d*	48	II*d*	63

	1911.		1912.		1913.		1914.		1915.	
	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.
Pressure of Vapour: Daily and monthly means	III*a*	4	III*a*	19	III*a*	34	III*a*	49	III*a*	64
Pressure of Vapour: Mean diurnal inequality for each month of the year and for the whole year	III*b*	4	III*b*	19	III*b*	34	III*b*	49	III*b*	64
Additional capacity of the Air: Daily and montly means	IV*a*	5	IV*a*	20	IV*a*	35	IV*a*	50	IV*a*	65
Additional capacity of the Air: Mean diurnal inequality for each month of the year and for the whole year	IV*b*	5	IV*b*	20	IV*b*	35	IV*b*	50	IV*b*	65
Daily total fall of rain (in inches) as measured by F. Chamber's self-registering gauge the tunnel of which is 28 feet above ground ..	V*a*	6	V*a*	21	V*a*	36	V*a*	51	V*a*	66
Daily total fall of rain (in inches) as measured by Newman's gauge, placed 4½ feet above the ground	V*b*	6	V*b*	21	V*b*	36	V*b*	51	V*b*	66
Mean velocity of the wind in miles per hour without regard to the direction from which it blew for each day of Bombay Civil Time; also the mean monthly velocity and its variation from the mean of the year by Robinson-Beckley Anemograph ..	VI*a*	7	VI*a*	22	VI*a*	37	VI*a*	52	VI*a*	67
Mean diurnal inequality of the velocity of the wind in miles per hour for each month of the year and for the whole year by Robinson-Beckley Anemograph	VI*b*	7	VI*b*	22	VI*b*	37	VI*b*	52	VI*b*	67
Mean velocities of the north or south and east or west components of the winds which blew on each day of the year	VI*c*	8	VI*c*	23	VI*c*	38	VI*c*	53	VI*c*	68
Mean diurnal inequality of the north or south and east or west components of the wind for each month of the year and for the whole year	VI*d*	9	VI*d*	24	VI*d*	39	VI*d*	54	VI*d*	69
Sums of the velocities, and mean velocities, in miles per hour, of the winds which blew in each month, from each of the sixteen principal directions and also the number of hourly observations which those sums comprise; the latter numbers indicating the relative frequency of the same wind (as to Direction) in the several months and of different winds during the same month	VI*e*	10	VI*e*	25	VI*e*	40	VI*e*	55	VI*e*	70
Mean velocity of the wind in miles per hour, for each day of Bombay Civil time; also the mean monthly velocity and its variation from the mean of the year	VI*f*	11	VI*f*	26	VI*f*	41	VI*f*	56	VI*f*	71
Mean diurnal inequality of the velocity of the wind in miles per hour for each month of the year and for the whole year ..	VI*g*	11	VI*g*	26	VI*g*	41	VI*g*	56	VI*g*	71
Mean monthly temperature of the ground in the thermometer shed and its annual variation at the respective depths of 1, 9, 20, 60 and 132 inches below the surface	VII*a*	12	VII*a*	27	VII*a*	42	VII*a*	57	VII*a*	72
Temperature of the ground exposed to the direct rays of the Sun at the depths of 1 inch and 8 inches below the surface for each of the five observation hours and for the mean of the day	VII*b*	12	VII*b*	27	VII*b*	42	VII*b*	57	VII*b*	72
Individual observations in each month of the year, indicating the greatest and the least values of the following elements, *viz.*, Height of Barometer (corrected for temperature); Temperature of air; Pressure of vapour, Additional capacity of air and ground temperatures, 1 and 8 inches below the surface (exposed to solar rays)	VIII	13	VIII	28	VIII	43	VIII	58	VIII	73
Relative Humidity of the air: Daily and monthly means of observations taken at 6, 10, 14, 16 and 22 hours daily	IX*a*	14	IX*a*	29	IX*a*	44	IX*a*	59	IX*a*	74
Extent of cloudy sky: Means of estimations made at 6, 10, 14, 16 and 22 hours daily, the whole sky being reckoned as 10·0 ..	IX*b*	14	IX*b*	29	IX*b*	44	IX*b*	59	IX*b*	74
Five day means of the different Meteorological elements, *viz.*, Barometric Pressure, Temperature of the air, Pressure of Vapour, Additional capacity of the air, Rainfall, north or south component of wind and east or west component of wind	X	15	X	30	X	45	X	60	X	75

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	1911.		1912.		1913.		1914.		1915.	
	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.
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List of principal seismic disturbances registered by the Colaba Seismograph No. 2 (N.—S.) ..	II*b*	91	II*b*	92	II*b*	92	II*b*	93	II*b*	94
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	1911.		1912.		1913.		1914.		1915.	
	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.
Observations of Vibration and Deflection taken with Magnetometer No. 7 (T. Cooke & Sons) for the determination of absolute Horizontal Force	I*a*	(3)	I*a*	(20)	I*a*	(37)	I*a*	(51)	I*a*	(66)
Observations of Vibration and Deflection taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.) for the determination of absolute Horizontal Force	I*b*	(6)	I*b*	(23)	I*b*	(40)	I*b*	(54)	I*b*	(69)
Observations of absolute Declination taken with Magnetometer No. 7	II*a*	(9)	II*a*	(26)	II*a*	(43)	II*a*	(57)	II*a*	(72)
Observations of absolute Declination taken with Magnetometer No. 3	II*b*	(11)	II*b*	(28)	II*b*	(44)	II*b*	(58)	II*b*	(73)
Observations of Inclination taken with inductor No. 41 by Schulze and galvanometer No. 200 by Plath	III*a*	(13)	III*a*	(30)	III*a*	(45)	III*a*	(59)	III*a*	(74)
Supplementary observations of Inclination taken with Dip Circle No. 160 and two 3½ inch needles Nos. 1 and 2 (Dover C.) ..	III*b*	(16)	*III*b*	(34)	III*b*	(49)	†III*b*	(63)	III*b*	(77)
Base line values of the Horizontal force magnetograph derived from observations of Horizontal Force by Instrument No. 7 and Instrument No. 3	IV*a*	(80)	IV*b*	(82)	IV*c*	(84)	VI*d*	(86)	VI*e*	(88)
Base line values of the Declination magnetograph derived from the observations of absolute Declination by Instrument No. 7 ..	V*a*	(90)	V*b*	(92)	V*c*	(94)	V*d*	(96)	V*e*	(98)
Base line values of the Declination magnetograph derived from the observations of absolute Declination by Instrument No. 3..	V*f*	(100)	V*f*	(100)	V*f*	(101)	V*f*	(101)	V*f*	(101)
Daily means of Horizontal force	VI*a*	(103)	VI*b*	(103)	VI*c*	(103)	VI*d*	(104)	VI*e*	(104)
Daily means of Declination (Easterly) ..	VII*a*	(105)	VII*b*	(106)	VII*c*	(106)	VII*d*	(107)	VII*e*	(107)
Monthly means of the magnetic elements determined from the absolute observations of Horizontal Force, Declination and Inclination and reduced to the mean monthly tabulations of the magnetograms ..	VIII	(108)	VIII	(108)	VIII	(108)	VIII	(108)	VIII	(108)
Monthly means of the magnetic elements determined from the absolute observations of Horizontal Force, Declination and Inclination and reduced to the mean monthly tabulations of the magnetograms (derived from supplementary observations with auxiliary instruments)	VIII*a*	(108)	VIII*a*	(108)	VIII*a*	(108)	VIII*a*	(108)	VIII*a*	(108)
Magnetic character on each day during the year	IX*a*	(109)	IX*b*	(110)	IX*c*	(110)	IX*d*	(111)	IX*e*	(111)
Magnetic character of each day during the year and the difference of the daily mean of H. from that of the preceding day (continuation of table 381 in "Colaba Magnetic Data, 1846—1905")	IX*f*	(112)	IX*g*	(113)	IX*h*	(114)	IX*i*	(115)	IX*j*	(116)

*From January 1912 to 16th May 1914 the needles used were Nos. 1/05 and 2/05.
†From 21st May 1914 observations of inclinations were taken with inductor No. 108 and galvanometer No. 108A by Otto Toefer and Sons.

	1911.		1912.		1913.		1914.		1915.	
	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.
Diurnal ranges of Horizontal Force ..	X*a*	(117)	X*b*	(118)	X*c*	(118)	X*d*	(119)	X*e*	(119)
Diurnal ranges of Declination ..	XI*a*	(120)	XI*b*	(121)	XI*c*	(121)	XI*d*	(122)	XI*e*	(122)
Mean diurnal inequality of Horizontal Force for each month of the year and for the whole year	XII*a*	(123)	XII*b*	(123)	XII*c*	(124)	XII*d*	(124)	XII*e*	(125)
Mean diurnal inequality of Horizontal Force for the summer months (April to September) and the winter months (January to March and October to December) and for the whole year for each of the years, 1911 to 1915 ..	XIII*f*	(125)	XII*f*	(125)	XII*f*	(125)	XII	(125)	XII*f*	(125)
Mean diurnal inequality of Declination for each month of the year and for the whole year..	XIII*a*	(126)	XIII*b*	(126)	XIII*c*	(127)	XIII*d*	(127)	XIII*e*	(128)
Mean diurnal inequality of Declination for the summer months (April to September) and the winter months (January to March and October to December) and for the whole year for each of the years, 1911 to 1915 ..	XIII*f*	(128)	XIII*f*	(128)	XIII*f*	(128)	XIII*f*	(128)	XIII*f*	(128)
Mean diurnal inequality of Vertical Force for each month of the year and for the whole year	XIV*a*	(129)	XIV*b*	(129)	XIV*c*	(130)	XIV*d*	(130)	XIV*e*	(131)
Mean diurnal inequality of Vertical Force for the summer months (April to September) and the winter months (January to March and October to December) and for the whole year for each of the years, 1911 to 1915 ..	XIV*f*	(131)	XIV*f*	(131)	XIV*f*	(131)	XIV*f*	(131)	XIV*f*	(131)
Mean diurnal inequality of Inclination for each month of the year and for the whole year..	XV*a*	(132)	XV*b*	(132)	XV*c*	(133)	XV*d*	(133)	XV*e*	(134)
Mean diurnal inequality of Inclination for the summer months (April to September) and the winter months (January to March and October to December) and for the whole year for each of the years, 1911 to 1915 ..	XV*f*	(134)	XV*f*	(134)	XV*f*	(134)	XV*f*	(134)	XV*f*	(134)
The mean temperatures in the Horizontal Force enclosure and the excesses over the means for each of the five observation hours during the period 1911 to 1915	XVI	135	XVI	135	XVI	135	XVI	135	XVI	135
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The Progressive change per day of the Hoirzontal Force Magnetograph as derived by different processes	XVIII	137	XVIII	137	XVIII	137	XVIII	137	XVIII	137
The progressive change per day of the Declination Magnetograph as derived by different processes	XIX	138	XIX	138	XIX	138	XIX	138	XIX	138
The progressive change per day of the Vertical Force Magnetograph as derived by different processes	XX	139	XX	139	XX	139	XX	139	XX	139

APPENDIX A.

Absolute values and the diurnal inequalities of Horizontal Force, Declination, and Vertical Force derived from quiet days for the years 1911 *to* 1915.

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	Table.	Page.
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Absolute values of Declination derived from all days and from quiet days selected by (1) the International Commission of Terrestrial Magnetism and (2) selected locally and the differences between the values derived from all days and from these two sets of quiet days.	II	[3]
Absolute values of Vertical Force derived from all days and from quiet days selected by (1) the International Commission of Terrestrial Magnetism and (2) selected locally and the differences between the values derived from all days and from these two sets of quiet days	III	[4]

	1911.		1912.		1913.		1914.		1915.	
	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.	Table.	Page.
Mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year for the quiet days selected by the International Commission of Terrestrial magnetism	IV*a*	5	IV*b*	5	IV*c*	6	IV*d*	6	IV*e*	7
Mean diurnal inequality of Horizontal Force for summer months (April to September), winter months (October to March), and whole year for each of the years, 1911-1915, for the quiet days selected by the International Commission of Terrestrial Magnetism	IV*f*	7	IV*f*	7	IV*f*	7	IV*f*	7	IV*f*	7
Mean diurnal inequality of Horizontal Force for each month of the year and for the whole year for the quiet days selected locally	V*a*	8	V*b*	8	V*c*	9	V*d*	9	V*e*	10
Mean diurnal inequality of Horizontal Force for the summer months (April to September), winter months (October to March), and the whole year for each of the years, 1911 to 1915, for the quiet days locally selected	V*f*	10	V*f*	10	V*f*	10	V*f*	10	V*f*	10
Mean diurnal inequality of Declination for each month of the year, and for the whole year for the quiet days selected by the International Commission of Terrestrial Magnetism	VI*a*	11	VI*b*	11	VI*c*	12	VI*d*	12	VI*e*	13
Mean diurnal inequality of Declination for the summer months (April to September), winter months (October to March) and for the whole year for the quiet days selected by the International Commission of Terrestrial Magnetism for each of the years, 1911 to 1915	VI*f*	13	VI*f*	13	VI*f*	13	VI*f*	13	VI*f*	13
Mean diurnal inequality of Declination for each month of the year and for the whole year for the quiet days locally selected ..	VII*a*	14	VII*b*	14	VII*c*	15	VII*d*	15	VII*e*	16
Mean diurnal inequality of Declination for the summer months (April to September), winter months (October to March) and for the whole year for the quiet days selected locally for each of the years, 1911 to 1915 ..	VII*f*	16	VII*f*	16	VII*f*	16	VII*f*	16	VII*f*	16
Mean diurnal inequality of Vertical Force Magnetograph for each month of the year and for the whole year for the quiet days selected by the International Commission of Terrestrial Magnetism	VIII*a*	17	VIII*b*	17	VIII*c*	18	VIII*d*	18	VIII*e*	19
Mean diurnal inequality of Vertical Force for the summer months (April to September), winter months (October to March) and for the whole year for the quiet days selected by the International Commission of Terrestrial Magnetism for each of the five years, 1911 to 1915	VIII*f*	19	VIII*f*	19	VIII*f*	19	VIII*f*	19	VIII*f*	19
Mean diurnal inequality of Vertical Force Magnetograph for each month of the year and for the whole year for the quiet days selected locally	IX*a*	20	IX*b*	20	IX*c*	21	IX*d*	21	IX*e*	22
Mean diurnal inequality of Vertical Force for the summer months (April to September), winter months (October to March) and for the whole year for the quiet days selected locally for each of the years, 1911 to 1915 ..	IX*f*	22	IX*f*	22	IX*f*	22	IX*f*	22	IX*f*	22

BOMBAY METEOROLOGICAL, MAGNETICAL AND SEISMOGRAPHIC OBSERVATIONS, 1911 TO 1915.

INTRODUCTION.

The present volume—the forty-first of its kind—extends the record of the Meteorological Observations at the Government Observatory, Bombay, to a period of seventy years, of Seismographic Observations to a period of seventeen years, and of the Magnetic Observations at the Alibág Observatory to a period of twelve years. The Alibág record overlaps the Bombay Magnetic Record for a period of two years and the continuity of the latter record which had run uninterruptedly at Colába for sixty years from 1846 to April 1906 is thus preserved and extended to a period of seventy years.

2. *Local Situation of the Colába Observatory.*—Two unequally developed ridges of trap hills running almost parallel to each other some three miles apart, constitute one of the conspicuous physical features of the Island of Bombay. Unlike Malabár Hill to the west which forms practically one high and almost unbroken ridge from Malabár Point to Maháluxmee, the poorly developed eastern ridge running from Colába point to Sion towards the north east, rises now and again in small hills and mounds, but usually lying low, often as not falls below the level of the sea and is deeply covered with alluvium. The Observatory is situated almost at the extreme south end of this narrow ridge of land extending about three miles to the south west from the Fort of Bombay and separating the Harbour from Back Bay. The level of the Observatory compound is about 32 feet above the mean level of the sea. Traps and greenstones which abound on the whole surrounding coast, crop up at various places through the red sandy soil which covers the greater part of the Observatory compound. The nearest elevated ground is Malabár Hill lying northwards at a distance of about 4 miles on the opposite side of the Bay, the highest point of which stands about 180 feet above the sea level, while that which subtends the largest vertical angle—but less than 1° 7′—as seen from this Observatory, is the southern hill of the island of Karanja to the east south east at a distance of about 8 miles across the Harbour.

The co-ordinates giving the geographical position of the Observatory are—

Astronomical	Latitude 18° 53′ 36″ North. Longitude72° 48′ 56″ East.	Geodetic	Latitude 18° 53′ 47″ North. Longitude 72° 48′ 47″ East.

The buildings concerned with the production of the observations recorded herein are, (1) the Astronomical Observatory and the Anemometer Tower, with a western wing, the greater part of which serves as a computing room, whilst the remainder is partitioned off for a photographic operating room; (2) the Magnetical Observatory with the adjoining Electrometer Tower; (3) the underground room for the photographically registering instruments; (4) the Thermograph Shed, enclosing the thermograph room; (5) the old Thermometer Shed; and (6) the three Seismograph Buildings.

3. *Alibag Magnetic Observatory.*—Early in 1900 the City of Bombay finally decided to employ electricity as motive power for its street tram service. Magnetic work, hence, which had run uninterruptedly for over fifty years by then at the Bombay Observatory, was thus threatened by the proposed introduction of the electric traction, and promt action in the interests of the Observatory seemed essentially urgent. Efforts to find some *modus vivendi* which might allow this work to be continued at the Observatory at Colába without serious vitiation from the disturbing effects of the lines, having proved abortive, no alternative seemed possible but to remove the magnetic work to some suitable site in the neighbourhood. It became imperative under the circumstances to make provision without delay for the establishment of a new Observatory at some protected site elsewhere, which might allow comparative observations for a fairly long period to be made at the new and old sites before the conversion of the ordinary tram-lines into electric traction was completed, and enable, if possible, the continuity of the Bombay record to be preserved.

The necessary sanction and orders were issued by Government, and a suitable site one least open to objection, from several recommended was selected at Alibag some 18 miles away from Bombay. It was far away, enough to be beyond the disturbing effects of the electric lines in Bombay, but sufficiently near, presumably to have similar magnetic conditions. The geographical position of Alibág also was otherwise favourable. There was no reasonable probability, at least in the near future, of a railway service (eventually driven by electric motive power) extending southwards from the Bombay line along the coast through Alibág or passing by it near enough to affect the magnetic work and compel the removal of the Observatory again to another site in a few decades.

The site was secured in 1902, and the construction of the buildings, the description of which has been given in the Observatory Volume 1906—1910, was completed in 1903, and comparative observations commenced in April 1904. After securing an undisturbed duplicate record extending over a period of two years, the magnetic work at Colába was stopped on the 31st March 1906 fortunately before the electric tram service was completed and had commenced its operation. Disturbed records at Colába were subsequently also secured for a few days when the electric tram service commenced working in Bombay. The comparative results of absolute values of the three elements H, D, and I, at the two sites show that at Alibág, Horizontal Force stands lower by ·00510 c. g. s., Easterly Declination stands higher by 53′·5, and Inclination stands higher by 1° 4′·7 than at Colába, which are the finally adopted differences. The variations of H., D., and V., were secured by a set of Watson's magnetographs at Alibág, and by Kew type magnetographs at Colába, and the results show, as anticipated, that the diurnal and annual variation phenomena were precisely the same at the two sites agreeing to within a γ or two in the intensity variations, and 0′·1 in the Declination variation (*vide* Appendix C, tables 1—4, Observatory Volume, 1906—1910).

Local Situation of the Alibàg Magnetic Observatory.—Alibág is a small town on the mainland, lying across the Harbour about eighteen miles south south east of Bombay. The site of the Observatory is located on the foreshore, facing south west, with a fair extent of sandy beach stretching before it. The ground unlike Colába is flat and low, lying about 15 feet above the mean sea-level. The situation of the Observatory is otherwise fairly similar to that at Colába. The rocks which abound on the surrounding coasts are traps as at Colába. The chain of small hills on the north and north eastwards about four miles away from Alibág which forms the continuation of the main trap barrier ridge running south from Bassein some forty miles to the north of Bombay, rises in small hills, mounds and rocky slopes which gather into a more or less central range of hills running north west to south east of which Kankeshwar, Sakarghad and Ramdharan about 1,200 feet high, form the highest peaks.

The co-ordinates giving the geographical position of the Observatory are—

Astronomical	Latitude 18° 38′·4 North. Longitude 72° 52′·35 East.	Geodetic	Latitude 18° 38′·6 North. Longitude 72° 52′·2 East.°

The Observatory grounds, consisting of about seven acres, are self-contained, being bounded on three sides by roads and on the southwest side by the sea. The Observatory consists besides the Director's quarters, Assistants' residence and office and photographic room, of two buildings chiefly concerned with the production of the observations recorded: (1) the Magnetometer Office where absolute observations are made, and a set of eye-reading variometers is located and (2) a Magnetograph Building, in which two sets of variation instruments by Watson and Eschenhagen, have been installed. Both buildings are constructed absolutely of non-magnetic materials. All the fittings are either of copper or brass duly tested before their use in the buildings, and the building materials throughout are non-magnetic, the stone used being a pure sand-stone from Porebunder in Káthiáwár.

The Magnetometer Building—a plan and section of which with pictures are given in plates 1-3 of the Observatory Volume 1906—1910—consists of a basement room and a tower with two floors. In the basement room is mounted the transit instrument for the determination of time locally. For this purpose the flat roof is so constructed as to allow of a portion of it to be opened whenever required for star observations. In the same room are mounted also, on isolated pillars a large declinometer and the two Kew type magnetographs which had been in action at Colába from 1872 to 1906. These are used here however, as simple eye-reading variometers only (observed five times a day). In the tower room on the second floor are mounted the Observatory standard instruments—magnetometer No. 7 by Cooke, Schulze's inductor, and dip circle. On the first floor auxiliary observations of H. and D. are taken with magnetometer No. 3 by the Cambridge Scientific Instrument Company and of I by another inductor by Otto Toepfer. On the ground floor magnetometer No. 137 by Dover Charlton is used for deflection experiments which serve as a check on the deflection experiments on the magnetographs for standardising the curves. The reference mark used for azimuth observations is the Kennery Light-house situated some five miles and a half away from Alibág, which is also visible from Colába and has served the same purpose there for the last fifty years. This mark the azimuth of which is 137° 53′ 25″ W. of S. can be seen from any of the three tower rooms through specially constructed slit windows suitably provided in the corners of the tower rooms as the building is oriented N.-S. and E.-W. The azimuth of Kennery from Colába is 179° 49′ 30″ E. of N.

The recording variation instruments are mounted in an *overground* magnetograph building, the elevation plan and section of which are shown in plates 4 and 5 of the Observatory Volume, 1906-1910. The inner room is 25 × 30 feet. It is surrounded by walls 3 feet thick of Porebunder stone. Access to the room is obtained by a single entrance centrally placed in the west wall. This is reached by a narrow passage all round the room, entrance to which from the lobby outside is gained from the east side. The passage is formed by the walls of the inner room and a wooden saw-dust

compartment three feet thick. An air space 3 feet wide is left all round the wooden compartment, and the whole is then surrounded by the outer wall of the building, 3 feet thick of Porebunder stone. The saw-dust compartment, it will be seen from the section given, is so designed that it completely surrounds the inner magnetograph chamber, passing over the top of this room below the flag stones of the flat roof above, and underneath the flag stones of the floor of the chamber. Suitably designed ventilators are provided both for the ingress and egress of the air at suitable levels. The thermograph curves given in plate 6 of the Observatory Volume 1906—1910 show that the design has proved successful in keeping the temperature uniform inside the room. The daily changes are practically *nil*, while the seasonal range is from 6° F. to 8° F. The temperature curve in the Alibág magnetograph room which is an *over-ground* building, it will appear from the charts, compares most favourably with that of the Colába magnetograph room which is an *under-ground* building. Isolated pillars are provided in the magnetograph room for the various instruments, which come up through the wooden compartment and flag stones of the floor. As already remarked elsewere the room contains the Watson's recording magnetographs for H., D. and V., and Eschenhagen's variometers for H. and V. The latter are used as eye-reading instruments only and serve as a control over the Watson's records, simultaneous eye-readings of both sets of instruments being secured at typical hours five times a day.

4. *Directorship of the Observatories.*—The observations of the years 1911 to1915 both at Colába and at Alibág were taken under the direction of Dr. N. A. F. Moos, D.Sc., F.R.S.E.

5. *Personal Establishment and Arrangements*, 1911—1915.—In the Magnetical, Meteorological and Seismographic Departments there are one First Assistant and eight observers and computers, and in the Astronomical Department there are one First Assistant and three observers. These several offices were filled at the end of the year 1915 in the manner exhibited in the following statement :—

Magnetical, Meteorological and Seisgmographic Departments, Colába.

		Initials.
First Assistant	Mukundrai Virshanker Unakar	Muk.
Second ,,	Vishnu Balkrishna Achwal	A.
Third ,,	Padmakar Waman Sirdeshpandye	P.
Fourth ,,	Mahadeo Dinkar Karmarkar	M. D. K.
Fifth ,,	Shridhar Vinayak Karmarkar	S.
Sixth ,,	Luxman Vishvanath Joshi	L. V. J.
Seventh ,,	Mahdusoodan Virshanker Unakar	M. V. U.

Magnetical Department, Alibág.

First Assistant	Ganesh Sadashiv Joshi	G. S. J.
Second ,,	Ganpat Pandurang Mayekar	G. P. M.

Astronomical Department, Colába.

First Assistant	Waman Vinayak Nene	W. V. N.
First Assistant (Time Ball Service).	Gopal Pandurang Sabnis	G. P. S.
Second ,, ,,	Krishnaji Bhalchandra Fagre	K. B.
Third ,, ,,	Mahadeo Ganesh Joshi	M. G. J.

Mr. Damodar Waman Sathaye, Astronomical Assistant, retired from service from 25th May 1911, and Mr. Narayan Sakharam Kelkar also retired from service on pension from 17th April 1913.

Mr. Sakharam Balaji Bapat, another Assistant, was allowed to proceed on sick leave and died on the 30th January 1913, Mr. Trimbak Raoji Oak, Third Assistant (Time Ball Service) was allowed to proceed on sick leave and died on the 8th June 1915 and Mr. Balkrishna Pandurang Mayekar, Second Assistant at the Alibág Observatory, suddenly died on the 1st January 1914.

The initials against the names of the Assistants are those which the respective officers attach to the several observations and operations performed by them.

6. *System of Observation and Reduction, and Distribution of Work.*—The Astronomical Observatory is furnished with a transit instrument and three sidereal clocks which are used for the determination of the local time primarily for the Time Ball service for communicating time to the shipping in the Bombay Harbour and for rating the large number of chronometers in stock for the ships of the Royal Navy and the Royal Indian Marine, and secondarily for the communication of time by the comparison of clocks three times a day, to the different departments of the Observatory.

The First Assistants are charged with the determination of values of instrumental constants and the more important observations requiring skill and long experience, and they generally control the whole of the work of their respective departments.

Upon the Third Assistant devolve mostly the photographic operations. He is also responsible for all the photographic instruments which require constant and vigilant attention. The anemographs and the meteorological and seismographic work generally are attended to by the Fourth Assistant. The routine magnetical, meteorological and seismographic observations are in general made by the rest of the observers, and computers, who are made to take up the work by rotation. Amongst the duties of the assistants are included the tabulation of all photograms and seismograms, the calculation and reduction of all meteorological and magnetical elements, the preparation of various meteorological and other returns, the calculation of daily averages and the writing out of the monthly abstracts. The latter consist of tables having the days of the month marked in numerical order in the first column and the hours of the day in order at the head of the columns, and there is one such table for each magnetical or meteorological element observed. In no case are the tabulations and reductions allowed to run into arrears unless very urgent special work is on hand. All observers attend the computing office when not actually engaged on observation duty. The Second Assistant is entrusted with the absolute magnetic observations which at Colába now are restricted to declination observations only made once about the middle of the month. At Alibág the First Assistant in charge of the Observatory is entrusted with the absolute magnetical observations and generally controls the whole work at the Observatory there. Eye observations and other general routine work including the photographic work are attended to by the Second Assistant. Although every man is delegated with duties which he is most competent to perform, precautions are taken to keep some of the observers fully instructed in the different operations, to provide for occasional absence of any member of the establishment. All computing operations are systematically performed by one computer and checked independently by a repetition of the operation by another. Residential quarters are provided on the observatory premises for all members of the establishment. On Sundays and general holidays all assistants at Colaba are set free except three, one being kept on observing duty, one in charge of the self recording instruments and one in charge of Astronomical duties. At Alibág, also, eye observations are taken and the photographic duties performed by the two assistants on Sundays and general holidays in rotation.

System of Observation at Colaba.

(a) *Daily Routine Operations.*

Magnetical, meteorological and seismographic observations are taken every day, including Sundays, at the hours 6, 10, 14, 16 and 22: the day commencing at midnight, Bombay (Colába), is reckoned from 0 to 24. The time of observation of each element is fixed and the observations are registered with strict punctuality as follows :—

From 5 minutes to the hour to 2 „ after the hour	Extent and description of clouds, state of the weather occasional phenomena, and direction of the wind.
At 2 „ „ „ „	Thermograph standard thermometer, dry bulb. Do. do. do. wet bulb.
„ 3 „ „ „ „	Newman's rain gauge (in wet season).
From 5 „ „ „ „ to 7 „ „ „ „	Thermometer in ground 1 inch deep. Do. do. do: 9 inches deep.
From 7 „ „ „ „ to 9 „ „ „ „	Newman's standard barometer No. 58 and attached thermometer. Do. do. No. 48 and do.
At 10 „ „ „ „	Thermometer attached to barograph.
From 15 „ „ „ „ to 18 „ „ „ „	Thermometers in the Milne's seismograph room and Milne's seismograph Zero reading.
At 19 „ „ „ „	Surface thermometrs in the sun 1 and 8 inches deep.

The maximum and minimum thermometers in the thermometer shed, as also the solar radiation thermometer, are read twice daily at 8 and 16 hours.

Observations made once daily include readings of (1) the ground thermometers 20, 60 and 132 inches deep, made at 14 hours, and (2) the nocturnal radiation thermometer made at 8 hours. During the monsoon months Newman's rain gauge is read daily at midnight and the discharges of the syphon of the self-registering pluviograph, are also read once or oftener as required. The electric clock controlling the Ball drop and the Harbour clock, is duly regulated by comparison thrice daily with the standard sidereal clock. Government chronometers, belonging to the Royal Indian Marine and Royal Navy stores at the Observatory and those received from merchant ships in the harbour are wound daily or twice a week as required, and comparisons with the standard clock are made with sufficient frequency to render the instruments always ready for issue at call with well-determined rates.

(b) *Weekly Routine Observations.*

Transit observations of stars for the determination of time for securing the errors and the rates of the sidereal clocks are made every Monday, Wednesday and Friday in the dry months of the year. During the monsoon months no opportunity is lost for observing either the sun or the stars whenever visible. The adjustment of the Transit instrument in azimuth is tested frequently by reference to the fixed meridian collimator marks, and level errors are tested and checked once every month. Errors of collimation, level, and azimuth are determined twice a year in May and December or whenever the collimator shows a displacement of the telescope or any considerable discordance appears in the clock errors derived from observations of stars of different north polar distances.

Observations of magnetic Declination are made once every month at Colába about the 15th of each month for the determination of the local declination value for the examination and comparison of compasses of ships in the Harbour.

System of Observation at Alibag.

(a) *Daily Routine Operations.*

Eye observations of the instruments specified below are taken daily, Sundays included, at 6, 10, 14, 16 and 22 hours at the specified instants of time about the full hour of Greenwich mean time :—

At 19 minutes to the hour :	Kew Horizontal Force Magnetometer and attached thermometer.
„ 17 „ „ „ „ :	Kew Vertical Force Magnetometer and attached thermometer.
„ 15 „ „ „ „ :	Declination Magnetometer and thermometer in the Magnetometer room.
„ 11 „ „ „ „ :	Eschenhagen's Vertical Force Variometer and attached thermometers.
„ 10 „ „ „ „ :	Watson's Vertical Force Magnetograph and attached thermometer.
„ 9 „ „ „ „ :	Watson's Declination Magnetograph.
„ 8 „ „ „ „ :	Watson's Horizontal Force Magnetograph and attached thermometer.
„ 7 „ „ „ „ :	Eschenhagen's Horizontal Force Variometer and attached thermometer.
„ 6 „ „ „ „ :	Thermograph in the Magnetograph room and standard thermometer (read twice daily at 6 and 16 hours only).

(b) *Periodic Routine Operations.*

Deflection experiments, with vibration magnet of magnetometer No. 3, the moment of which is determined every week, as deflector at 100 cms. distance on the horizontal force magnetograph and 75 cms. distance on the vertical force magnetograph, are made once every fortnight. Similar deflection experiments with vibration magnet of magnetometer No. 137 as deflector are made once a month for the purposes of check work and corresponding deflection experiments at the same distances are also made every month by the same deflector upon a magnet appropriately suspended over the pillar on the ground floor of the tower.

Deflection experiments, with vibration magnet of No. 3 as deflector at 100 cms. distance on the horizontal force variometer and 75 cms. distance on the vertical force variometer are made once a fortnight.

Observations of vibration and deflection for the determination of absolute horizontal force are made with the Observatory standard instrument No. 7 on Wednesdays and with the auxiliary instrument No. 3 on Mondays. With the same instruments observations of absolute declination are taken every Thursday. Between May 1911 and May 1914 observations of inclination were made with the Schulze's Inductor, which is the Observatory standard instrument, every day in the year exception Sundays and holidays. Since May 1914, when another inductor by Otto Toepfer was brought into use, observations of inclination have also been made every day in the year but each of the two inductor instruments is observed on alternate days, both the instruments being observed simultaneously for check work on Saturdays. Upto May 1911, observations of inclination with dip circle No. 160, which was up to the end of the year 1910 the standard instrument, were taken twice a week every Tuesday and Friday, two complete sets being obtained with each of the two needles on both days.

After May 1912 however when regular daily observations with the inductor commenced, observations with the dip circle were taken once a week till May 1914 and only occasionally thereafter.

For investigational purposes, for one year between May 1911 and May 1912, absolute observations of horizontal force and declination were made every day in the year except on Sundays and holidays, each of the two unifilar magnetometers being observed on alternate days. Also observations of inclination with both the instruments—the Schulze's Inductor and the dip circle—were made every day during the period.

Installation of the transit telescope was effected in December 1904. Transit observations of stars for the determination of time are made generally on Mondays and Fridays in the dry months; during the monsoon no opportunity is lost of observing the sun or stars whenever visible. The adjustments of the transit instruments are frequently tested by reference to the fixed collimator marks and by level observations; the residual errors of collimation, level and azimuth are determined periodically twice a year, or whenever the collimator shows a displacement of the telescope or any considerable discordances appear in the clock errors derived from observations of stars of different north polar distances.

Before the transit was installed and brought into use, time was communicated to Alibág from Colába, occasionally by heliograph signals, and regularly four times a week by a preconcerted arrangement of timing the flashes of the Kennery Light-house which is visible from both the observatories. This method is now and again advantageously employed as check on the concurrent time determinations by star observations at Bombay and Alibág, specially during the monsoon months when star observations are not possible.

7. General description of the magnetical meteorological and seismographic instruments, their adjustments and the process of reduction.

The following details show the special circumstances in connection with the condition, situation and adjustments of the various instruments, as also the habits of the observers and the routine processes of reduction, to enable the reader to form his own independent judgment as to the degree of precision attained in the results and the weight to be attached to any deduction or conclusion that may be drawn from the observations.

(a) Meteorological Instruments at Colába, 1911 to 1915.

Standard Barometer.—The barometer fixed on the eastern wall of the magnetical observatory a few feet from the north-east corner of the room is by Newman, No. 58, and is the same which has been in uninterrupted use since the establishment of the observatory. Its tube is 0·530 inch in diameter. The cistern, which is of glass, is 37 feet above the mean sea-level at Colába. The brass scale is moveable and terminates at the lower end in a point of ivory which is designed to be set at every observation so as just to meet its reflected image as seen in the mercury. The scale is primarily divided to 0·05 inch and by means of a vernier, 0·002 inch can be read off. To the moving vernier are attached two small brass plates one in front and one behind the tube. The setting of the instrument consists in raising or lowering the vernier until the lower edges of the brass plates appear just to cut tangentially the convex surface of the mercury in the barometer tube, the line of sight being so regulated in height as to coincide with the two edges. A thermometer with a cylindrical bulb, attached to the barometer, dips into the cistern and the readings of temperature derived from this were in use upto 1884. In an investigation described in the "Bombay Magnetical and Meteorological observations, 1871 to 1878," it was discovered, however, that the readings of the thermometer, which was supposed to record the temperature of the mercurial column of the barometer, were considerably in error, and the use of the thermometer hence was discontinued from the beginning of 1885 and a thermometer by Murray and Heath, No. 2, divided to half degrees, with its bulb immersed in a column of mercury held in a short glass tube of nearly the same diameter as that of the barometer tube, was fixed to one side of the barometer. The readings of this thermometer have been used since 1885·0. The error of this attached thermometer varies by about a quarter of a degree within the annual range of the temperature of the barometer, and in adopting a mean error throughout, small pressure corrections of $\pm$ ·0003 have been disregarded.

The barometer was lifted down in 1866 and the mercury carefully run up to the top of the tube when it gave the sharp metallic click indicative of a good vacuum. It was replaced carefully in its position, the tube, etc., being kept in proper adjustment to verticality. The barometer is of that particular class, a description of which occurs at page 56 of the "Report of the Committee of Physics of the Royal Society, 1840," and therefore the scale of the barometer is laid off from the zero point from an authentic standard.

Since 1841 when it was first mounted, there has been a gradual accumulation of scum on the surface of the mercury in the cistern, and the glass cistern became more and more opaque until the setting operation of the ivory zero point of the scale became a matter of difficulty and some uncertainty. For this reason the usual method, as referred to above, was changed on the 22nd May 1866. On that day the zero of the scale was set *once for all* and the setting screw was removed, and suitable corrections for capacity were thenceforward applied to the readings. These were taken from a table derived from the following formula :—

$$\text{Capacity correction} = \cdot 04321\ (h_o - 29\cdot 943)$$

h_o represents the uncorrected reading '

data for the construction of which will be found in the " Bombay Magnetical and Meteorological Observations, 1865 to 1870 ", Introduction, pp. x, xi.

As at Bombay the fluctuation of the barometer reading from its mean value very rarely reaches ·4 inch, requiring a correction of ·017 inch, it seems very improbable that an error of so much even as ·001 inch occurs from any inaccuracy in the adopted values of the relative capacities of the tube and the cistern. Since the change was effected, the comparability of the observations for showing the finer variations has on this account throughout been much better secured.

The depression of mercury due to capillary action in a tube of 0·53 inch diameter being small, no correction is applied on this account.

On 30th July 1875 it was discovered that the vernier scale of the barometer was short by ·002 inch. To correct the errors arising from this fault instructions were issued to note the positions of coincidences at ·000 and ·050 of the vernier scale with the scale of the barometer and also the non-coincidences at the above scales when the barometer reading was in exact half-tenths of an inch. It became then an easy matter to construct a table of corrections and to apply them for all positions of the vernier. These corrections have throughout been applied since.

The barometer is read daily including Sundays at 7^m after the full hours of observation—6, 10, 14, 16 and 22. Each reading is corrected by the application of the temperature correction reducing the temperature of the mercury column to 32° F. and that of the brass scale to 62° F. Another correction is applied to remove the error of discontinuity due to the change of thermometer. The first correction is made by means of Table II of the Report of the Committee of Physics of the Royal Society, the second by a constant reduction of the corrected pressure by ·002 inch. The considerations on which the latter correction is based, are as follow :—(1) the tabulations of the barograph are known to exhibit correctly the diurnal variations of barometric pressure, free from any sensible influence of variations of the temperature of that instrument ; (2) the mean of twenty-four hourly barograph tabulations on any day is taken to correspond to the mean of the same twenty-four hourly pressures observed with Newman's barometer, No. 58, and corrected for the temperatures indicated by the old attached thermometer ; (3) it does not follow that the mean of the tabulations for the five observation hours (6, 10, 14, 16 and 22) will then correspond exactly to the mean of the observed pressures for the same hours, because the old thermometer does not indicate precisely the actual variations of temperature of the mercurial column : in fact the latter mean pressure was, on the average of all the observation days of the year 1872, ·0008 inch in excess of the former mean pressure ; (4) nevertheless the correspondence for the five observation hours was adopted as near enough to identity with the correspondence for the twenty-four hours, and the recorded mean pressures of the year 1873 to 1884 will thus be ·0008 inch in excess of those of the years before 1873 ; (5) the old attached thermometer and the thermometer No. 2 by Murray and Heath were read of together at the five observation hours throughout the year 1883, and the average excess of the former reading over the latter was found to be 0°·62 ; (6) hence to make the pressures reduced for the readings of Murray and Heath, No. 2, correspond to those reduced for the readings of the old thermometer the former pressures must be decreased by ·0027 × 0·62 = ·0017, or—as the pressures are read and calculated only to thusandths of an inch—by ·002 inch. Thus taking the period before 1873·0 as a standard period, the recorded annual mean pressures of the years 1873 to 1884 will be ·0008 inch too high, and those of 1885 and later years ·0005 inch [= — ·0020 + ·0017 + ·0008] too high.

Indirect comparisons of the barometer have been made with the Kew standard by means of two mountain barometers by Negretti and Zambra, numbered 705 and 711, when they were both found (in July 1876) to read ·011 inch higher than the Observatory standard. In England, however, they had been found to read ·007 and ·006 respectively higher than the Kew standard. Hence the Observatory barometer reads on an average ·004 below the Kew standard. It happens that this is exactly the average amount by which the readings of Newman's barometer have been over reduced for temperature (*vide* Introduction to the Bombay Magnetical and Meteorological Observations, 1871 to 1878, paragraph 72).

Barograph.—The photographic barometer stands separate on two pillars in the magnetograph room. It was supplied through the Kew Committee of the British Association after being tested at the Kew Observatory, and is similar in construction to those adopted by the Meteorological Committee of the Royal Society for the seven observatories established by them in the United Kingdom in the year 1867. The barograph has been treated as an independent instrument in respect of the variation of pressure occurring in the course of a day, but only as an auxiliary to Newman's standard barometer, No. 58, in respect of the mean daily pressures. The excess of the mean of the five observations of the standard barometer made daily, over the mean of the corresponding five barograph tabulations has been used as a correction to the mean of the twenty-four hourly tabulations for the same day, a new correction being calculated for each day. A detailed account of the instrument and its particulars and adjustment is given in the "Bombay Magnetical and Meteorological Observations, 1871 to 1878, pages xvi to xlvi."

Thermometers—Standard Dry Bulb.—The thermometer is by Casella and marked No. 401: it is a mercurial thermometer, with a cylindrical bulb 3·7 inches long and about 0·37 inch in diameter. The stem is graduated and divided into degrees: the range is from 0° to 120°, measuring 12·36 inches; and the bulb is freely exposed to the air. It is placed in the cage of the thermograph shed about 5 inches from the thermometer which records photographically and is similarly exposed.

Standard Wet Bulb.—This is also a mercurial thermometer by Casella No. 402, and has a cylindrical bulb 3·7 inches long and 0·37 inch in diameter. The thermometer is graduated on its stem and is divided into degrees with a range from — 10° to + 120°, measuring 13·03 inches. The bulb is covered with muslin, and is kept moist by the capillary action of a bundle of fine cotton threads immersed in a small vessel of water near the thermometer bulb and passing loosely round the thermometer stem just over the bulb. The same vessel of water supplies the evaporating fluid to the photographic wet bulb placed about 3 inches distant.

The errors of the above standard thermometers have been carefully found and corrections duly applied. The errors were determined by a Kew standard (No. 368) thermometer in February and March 1875, at fourteen points ranging between 32° and 102°, and the readings were found to be within 0°·1 of the truth. On 20th December 1877 the errors of the freezing points were also tested, showing no noticeable change (*vide* paragraph 53, Table 10 of the Introduction to the Bombay Magnetical and Meteorological Observations, 1871 to 1878). On the 26th November 1917, the freezing points were again tested and the zero of the dry bulb standard thermometer No. 401 was found to have changed from 32°·6 to 33°·0 F and that of the wet bulb standard thermometer No. 402 from 32°·5 to 33°·0 F. A rise of 0·4 and 0·5 degree was respectively noted thus in the zero points of these thermometers during the period. Properly graded corrections would have to be applied to the series 1878—1915 and these will be indicated in the next volume.

Photographic Dry Bulb and Wet Bulb.—The height of the bulbs of the thermometers of the thermograph above the ground is 10 feet. The cage is placed on one of the most exposed parts of the Observatory grounds and away from any building; it is, however, screened, as is also the thermograph room in which the recording apparatus is placed, by a roomy shed with a planked roof which is everywhere 2 feet above the roofs of the cage and room: the sides of the shed are of the louvre construction, with double sheets of zinc enclosing a thick layer of felt substituted for the wooden laths, and with a vertical distance from lath to lath of one foot: the lowermost two feet of the sides are guarded simply by horizontal iron rods: the roof of the shed is covered with thick felt and then with strong cavas, and the whole of the exterior—sides and roof—is painted or limewashed white.

Ground Thermometers.—Thermometers with their bulbs at the respective depths below the surface of the ground of 1, 9, 20, 60 and 132 inches are regularly observed, the two former five times a day and the three latter once a day at 14 hours. They are all by Newman, of London, and are divided on brass scales, and the value of one division, approximate range of part of scale exposed above ground, and lengths of that part and of one average degree are shown below for each thermometer:—

Depth of Bulb.	Divided to	Approximate Range of exposed part of Scale.	Length of that Range.	Average length of 1°.
Inch.			Inches.	Inch.
1	1°	30° to 145°	8·19	·071
9	0°·2	70° to 115°	5·20	·116
20	1°	35° to 160°	6·73	·054
60	1°	35° to 160°	6·81	·054
132	1°	50° to 140°	6·44	·072

The 1-inch and 9-inch thermometers are on flat brass scale frames, which lie against wooden posts in the ground, and they have their bulbs in contact with the loose red earth which fills the holes in which they are placed; the 20-inch, 60-inch, and 132-inch thermometers have their lower parts enclosed in brass tubes with ends curving off to a point, and the upper parts are in wooden box frames to which the brass scales are fixed. The reason why only one observation is made daily of the three deeper thermometers is that it had been found by hourly observations in 1849, 1850 and 1851 that no appreciable diurnal variation of temperature reached the depth of 20 inches.

The 9-inch thermometer was found broken in October 1912. Another thermometer had to be ordered out from England and this thermometer No. 203096 by C. F. Cassella was brought into use from March 1914. Its upper stem which includes the range of degrees to which the variations of temperature are subject is fixed to a wooden frame while the lower stem and the bulb are enclosed in a perforated brass case, which is sunk in the ground, the bulb being kept at the depth of 9 inches.

The errors of graduations of the ground thermometers are unknown.

Ground thermometers Nos. 69570 and 69571 by Casella were put in the rain gauge enclosure with their bulbs at the depth of 1 inch and 8 inches below the surface respectively in June 1902. The surface thermometer 1 inch deep was found broken and was provisionally replaced by another thermometer No. 122 by Newman, on the 17th April 1909. The error of this thermometer was not determined. A new thermometer No. 3426 by Munro was ordered out from England and brought into use from January 1915. The error of this thermometer for practically the full range of the observed ground temperatures does not exceed 0°.1 F.

Robinson-Beckley Anemograph.—From the establishment of the Observatory till December 1865 a rough pressure anemometer was in use. This was replaced by a small anemometer by Robinson which remained in use up to June 1867. From the beginning of the month of June 1867 was brought into use an anemograph of the kind designed by Robinson, with improvements by Robert Beckley, and it remained in action till October 1907 when it was replaced by a new instrument of the same pattern and by the same makers. It was made by Mr. R. W. Munro, and was supplied through the Kew Committee of the British Association, after being tested at the Kew Observatory. In this instrument the arrangements for the registration both of movement and direction of the wind are mounted on one shaft, and the registrations are made on a single sheet of paper, which is changed daily. The essential part of the apparatus for measuring the movement is a vertical spindle, to which cross arms are attached at the top, carrying four hemispherical cups of copper. The cups are attached to their several arms, so that, looking from the central axis, their convex sides are seen on the right hand, and the wind, acting with greater effect upon the concave than on the convex sides of the cups, causes the system to rotate in a right-handed direction. It is the number of these rotations, 140 of which are reckoned to a mile of movement of the wind, that tells us how fast the wind has been blowing; and the number is reduced, by means of wheelwork, 7,000 times before reaching a small cylinder carrying a continuous brass spiral projecting edge which serves as a pencil to trace the movement of one complete revolution on the registering paper. The paper is metallic of the kind used for pocket-books, and is wrapped round a brass cylinder, which is kept rotating by clockwork, and as the paper passes under the spiral pencil which presses slightly upon it, a black trace of the movement is received upon it. The wind vane, which consists of a pair of windmill vanes with connecting spindle having an endless screw in the middle and gearing into a fixed horizontal toothed wheel, is attached to a tube that surrounds the lower part of the vertical movement spindle; to the bottom of the tube is fixed a toothed wheel, which, in communication with other such wheels, conveys the motion of the vane *unchanged* to a small cylinder with a spiral pencil, which traces the changes of direction on the register. The whole arrangement is so devised as to have both the velocity and direction traced on parallel strips or bands on one and the same sheet of paper which is changed daily at 10 hours. The heavy parts of the instrument—the direction vane and appendages, and two long brass tubes which connect the instrument proper with the recording apparatus—are supported on friction balls (friction rollers in the case of the new instrument) which run in grooves partially filled with oil, thus reducing the friction to a minimum. The instrument is erected on the old Time Ball Tower, at a height of 53 feet above the ground, and 95 feet above the mean sea level, over a platform 12 feet in diameter, which is designed to give ready access to the instrument, and to protect it from irregular currents of wind, glancing from the convex surface of the dome. It is supported outside by a fixed cast-iron standard, to which is attached, at the top, the toothed wheel into which the endless screw of the spindle connecting the wind mill vanes gears. The centres of each pair of opposite hemispherical cups are four feet apart, and three and a half feet above the platform (four and a half feet in the case of the new instrument), and the diameter of the cups is nine inches. The diameter of the vanes is 15 inches, and the breadth of the fans 4 inches. The register form is printed in red, with lines dividing its length into hour spaces; and its breadth, on the movement side, into five spaces, each representing 10 miles of movement of the wind, and numbered

from 0 to 50 miles; and on the direction side, into spaces corresponding to 11¼ degrees on each side of the 16 principal directions N.N.E., N.E., etc. . . . . N.N.W., N., which spaces are numbered consecutively 1, 2, etc. . . . . 15, 16.* In case of register forms received for the new instrument since October 1907, the direction side is divided by lines into eight spaces only corresponding to intervals of 45°.

Tabulation of Anemograms.—Numerical tabulations have been made of the movement and direction of the wind during the interval between every two successive hours in the following manner:—the number of miles indicated at the point where the velocity trace cuts a horizontal hour-line being read for two successive hours, the excess of the latter over the former reading (adding 50 if the trace has passed over from left to right of the form) gives the movement for the interval. The estimations of movement are made only to the nearest full mile and of direction to one of the sixteen principal directions corresponding to an interval of 22½ degrees. If the direction trace does not lie all in one space during the full interval of an hour, and if the change of direction exceeds 90° or eight points, the whole observation for that hourly interval is rejected; but if it lie within that limit, the direction is estimated—by an inspection of the movement and direction traces together—whence the aggregate flow of air was the greatest and this direction is adopted for the full hour. On the average of the years 1871 to 1915, out of 8,754 hours during which the instrument was in action, 2 only had to be rejected because the direction of the wind varied more than eight points within the hour.

Method of reduction.—Hitherto we have had to speak of phenomena liable only to simple increase and decrease of value and not subject to any change of quality. Such phenomena being properly and completely evaluated by simple numbers, we may apply to the numbers any arithmetical operations, such as averaging, and infer from the results of those operations corresponding properties of the phenomena. But we have now come to a phenomenon which requires two numbers to express it, one representing its amount and the other a varying quality; the first referring to the velocity, and the second to the direction of the wind. Here we may no longer apply arithmetical processes directly and indiscriminately to the observed numbers; but, the subject being one of motion, we must treat them according to the principles of the science of motion. These principles tell us that the motions may be equally well expressed by means of two varying numbers referring to two invariable qualities, as by a varying number referring to a varying quality; and they show us how to obtain either form of expression from the other. The invariable qualities chosen in the present case are the directions north and east, the actual wind blowing in each hour being resolved into north and east components, which may be regarded separately as the velocity of the wind in the invariable direction north or south, and the velocity of the wind in the invariable direction east or west. The resolutions are effected by means of the formulæ—

$$\text{North component of velocity of wind} = m \cos (n \times 22\tfrac{1}{2}^\circ),$$
$$\text{East component of velocity of wind} = m \sin (n \times 22\tfrac{1}{2}^\circ),$$

where m is the movement observed, and n the number of the direction space under which the wind of the hourly interval is classed. When the sign of either of these calculated quantities is negative, it implies that the wind blows from the opposite direction, *i. e.*, from south or west. The calculations are readily made by means of tables to the nearest tenth of a mile of velocity per hour. Having now substituted the two equivalent winds for the real one, we may with propriety proceed to combine together numbers of observations by algebraical addition and averaging, treating the north and east components of the wind each by themselves. The averages thus found from the observations of any given period will represent the velocity with which the wind must blow from the northward (from the southward if the sign of the average be negative) continuously for the whole period, in order that the total movement of the wind from that direction may be the same as the total movement from the same direction produced by the winds which actually blow, and similarly the velocity with which it must blow continuously from the eastward (westward if the sign of the average be negative).

No corrections have been applied to the anemograph tabulations on account of friction.

The correct formula for deriving velocity in miles per hour from wind pressure in lbs. per square foot is $P = \cdot 003V^2$, and in the computations involved, the actual velocity of the wind as derived from the run of the cups, is obtained by the use of factor 3 originally suggested by Robinson. All wind figures therefore published up to the year 1910, have been derived by this factor. As a result however of a prolonged inquiry this factor has been found to be much too large and its correct value has been eventually fixed at 2·2. All velocities in this volume hence have been derived from the new factor, and the whole data of previous years up to 1910 which have thus been overestimated will have to be reduced by ·73 in order to secure true velocities comparable with these and future wind data.

* A more detailed account of the Colába anemograph will be found in the "Bombay Magnetical and Meteorological Observations, 1865 to 1870, Appendix I, page 199.

In October 1907 the old anemograph which had been in action at the observatory from the year 1867, was replaced by a new one by R. W. Munro & Co. The comparison of the record of this old instrument with that of Dines's from 1898 to 1907, showed that on the average the factor stood at 2·11. Similar comparison from 1908 to 1912 between Dines's and the new anemograph records showed the factor to be 1·98 which has continued to remain the same to date. Thus while the comparison showed that the two anemographs were nearly in close agreement, the new instrument seemed to record slightly larger velocity by about 6 per cent. As however the conditions of comparison with the Dines's Anemometer could not be accepted as absolutely identical in the two series, no refinement in the results by way of correction, at present seems advisable. *Vide* also paragraph below and tables in Appendix B of the Observatory Volume, 1906 to 1910.

Dines's Anemometer.—This instrument by R. W. Munro of London was received in January 1897 and fitted up in February on the same tower on which the Robinson-Beckley Anemograph is fixed, and it has been in action since then. The fixture is so arranged that the one instrument does not in any way interfere with the action of the other. The anemograph is fixed about 3 feet high centrally on a flat platform on the top of the old Time Ball Tower and the pressure tube anemometer is located on the edge of this platform to the north east—the distance between the two instruments being the radius of the platform—about 6 feet. The vane of the latter is placed about 6 feet above the platform, so that it is about 3 feet above the level of the cups of the anemograph. The tower is 53 feet high from the ground and 95 feet above mean sea-level and, looking at the exposed position of the tower, the two instruments have been placed in as identically analogus conditions as was possible under the circumstances. The instrument consists of two main parts, the " head " and the " recording apparatus." The " head," which is fixed on the top platform, is composed of two parts, the moveable and the fixed. The former consists of a hollow tube (1 inch in diameter) to which is attached at right angles at the top and opening into it, another similar tube open at one end but closed at the other where the vane is attached. The fixed part consists of three concentric tubes forming two annular spaces. The central tube, which stands higher than the middle tube by about ·7 inch, is supported a little below the top of the middle tube by two radial pieces and is closed at the top to form a hollow cup which serves as a support for the pivot provided centrally in the horizontal vane tube of the moveable part allowing the latter to move freely round the middle concentric tube as axis. The moveable part thus opens into the inner annular space. The outermost concentric tube, which is considerably shorter in length than the middle one, has some fine perforations bored all round the tube, the annular space between it and the middle tube being closed at the top. As the wind vane attached to the moveable tube keeps the latter always facing the wind, the action of the wind in the inner annular space is compressive as the wind blows directly into it, while in the outer annular space the air as it rushes past the small perforations produces a suction effect resulting in decrease of pressure.

The recording apparatus consists of a large cylindrical vessel almost airtight, filled with water to a certain level. In this is introduced a specially constructed hollow copper float, open from below and weighing about 66·46 ounces, which rises or falls in response to the change of pressure of the air in the cylinder above the float and of the air within the float, caused by the action of the wind which is communicated from the " head " to the recording apparatus by two flexible tubings (40 feet long) led by gentle curves from the former to the latter. The tube which is attached to the suction part of the " head " transmitting decrease of pressure, enters the vessel from the top lid, while the other leading from the pressure part of the " head " transmitting increase of pressure, leads into and opens inside the float. As the action of the wind in the former space is to reduce the pressure the float becomes more buoyant and rises, while the action of the wind inside the float causes increase of pressure, and thus co-operates in raising the float. The float ends in a narrow smooth rod which, passing through an almost airtight vulcanite collar in the top lid, carries a small cup with attachment of pen, etc. On the top of the lid, a little removed from the recording pen, is fixed a small cylinder driven with clock-work, which carries the paper chart. The pen is so attached as just to fall on this paper by its own weight to avoid unnecessary friction between the two. When the float is put down, the height of the pen is so adjusted as to allow it just to reach the zero line on the chart. The float under ordinary circumstances when the communication between it and the head is cut off, rises through a certain distance, carrying the pen with it, which is again brought carefully back just to zero by the addition of small weights in the cup. The instrument is now ready for recording changes of pressure when communication is opened between it and the head. The peculiar construction of the float makes the upward force measured in units of velocity to vary uniformly with the ordinate: thus a velocity of 10 miles gives an ordinate of ·6 inch on the chart, that of 20 miles 1·2 inches, and so on.

The comparison of the instrument with a U tube pressure gauge locally improvised, showed on the result of a series of experiments, that the relation between W—the difference in level of the water

in inches in the two arms of the U tube, which is a measure of the pressure of wind—and V the velocity of the wind in miles per hour as indicated in the Colaba Dines's chart, was $W = \cdot 00078V^2$ instead of $W = \cdot 00073V^2$ which should have been the correct relation if the instrument was in order and in perfect adjustment. The result hence showed that the Colaba Dines's instrument indicates only about 96 per cent. of the true velocity. This defect of 4 per cent. is appreciably large but considering that the magnitude of the probable errors of observations in the experiments, was not negligible and that ordinarily the velocity does not exceed 20 miles per hour, the graduations on the chart of the Dines's recorder may be accepted as indicating correct velocities for all practical purposes, except for high winds for which a small correction seems necessary.

Tabulation of the Anemograms.—Numerical tabulations are made in a table in which the days of the month are marked in numerical order in the first vertical column and the hours of the day at the head of the succeeding 24 columns where the hourly averages are entered. The twenty-sixth column gives the sum and the next column the mean hourly velocity for the day. At the bottom of the table columns are provided for the sums, means and variation. The determination of the hourly average is generally done by inspection, the hour when necessary for accuracy being subdivided into convenient divisions. The average of these divisions is taken as the mean hourly velocity, due weight being given to the time of each sub-division. In very complicated movements and doubtful cases the planimeter is used to check the inspection results.

Four photolithographic copies of the velocity chart shown in Vol. XXXVI of 1897 at page x represent different but typical characters of the wind. The first shows the character of the wind during a thunderstorm day, the second during a somewhat gusty day, the third during a somewhat stormy day, and the fourth during a typical normal day.

Rain gauges.—Newman's rain gauge, which has been in use since 1845, is made of copper and exposes for the collection of rain-drops a circular surface of an average diameter of 12·035 inches forming the top of a funnel, which opens into a cylindrical vessel below, having a diameter of 5·732 inches: a float of slightly less diameter, so as to rise and fall freely, rests upon the water in this vessel and having a wholly convex external surface, it allows the rain as it falls to flow off and raise the level of the water and with it the float. To the middle of the float is fixed a wooden rod, graduated with divisions, each of which represents ·05 inch of rain; and the readings of this scale, which are easily estimated to fifths of a division, are made where it is cut by the upper edge of a light brass rod placed horizontally across the mouth of the funnel, but half an inch below the edge of the exposed circular surface; the scale passes through a hole in the middle of the horizontal rod, and is thus kept always in a vertical position. The range of the scale is from 0 to 3·50 inches, and the readings of the scale are entered in the meteorological register and the differences taken for every interval between successive observations; the rain is allowed to accumulate in the vessel generally till the reading is somewhere above 2·00 inches, when the water is let out, by means of a brass cock at the bottom, till the reading comes down to 0·00 inch. This latter reading is always mintained during intervals of dry weather—when, from evaporation, the scale would otherwise fall lower—by pouring small quantities of water into the gauge; the reason of this is obvious, as, if some water were not always retained, the float would sometimes rest on the bottom of the vessel and so cease to perform its function of rising equally for equal increments of rain. The scale of the wooden rod was graduated so as to agree approximately with the data—the diameters of the gauge and measuring vessel— given above. The error of the scale according to which the rod was graduated was less than a thousandth of the whole.

The old wooden scale was accidentally broken on the 2nd August 1916. An exact copy of it was prepared, duly tested and fixed to the float.

Newman's gauge stands on a large rectangular block of stone, in a position intermediate between the Entrance Gate, the Magnetical Observatory, and the Thermograph Shed, where the altitude of the highest neighbouring object, as seen from the gauge, is about 30°. It is supported by three feet, which are embedded with lead in holes cut in the stone block, and its circular mouth is at a height of 4½ feet above the ground and about 35 feet above the mean sea level.

Photographic rain gauge.—A description of this instrument also will be found in the Introduction to the "Bombay Magnetical and Meteorological Observations, 1871 to 1878," page xlvi. In the years 1911 to 1915 the syphon discharges were received in glass bottles and measured by means of graduated glass tube and a marked glass bottle holding exactly half an inch of rain.

It was mentioned in former years that the occurrence of the discharging action of the syphon was occasionally liable to some uncertainty—the water at times trickling over the bend of the tube in considerable quantities before the proper discharge commenced. After trial of many modifications in the form of the syphon one was at last hit upon, which is free from this fault, and by which the tube is, moreover, kept in a satisfactorily clean condition from beginning to end of the monsoon,

simply by the washing that takes place in the ordinary automatic discharges. Since November 1884, when the new syphon was brought into use, the discharges have been regular and have failed on very rare occasions. To prevent birds alighting upon the funnel, and choking it with their droppings, a conical arrangement of pointed iron spikes surrounding the funnel was attached in 1882, and was found to be effective.

Constants for converting syphon discharges into inches of rainfall.—As the surface exposed by the rain gauge funnel is 50·286 square inches, an inch of rain contains 823·955 cubic centimeters. With the aid of a cubic centimeter measure accurate to a thousandth of 100 cubic centimeters which it was designed to measure, 412 cubic centimeters of water were poured into a narrow-necked glass bottle and a file mark was made on the neck at the level up to which the water rose. A glass tube was also graduated by means of the same cubic centimeter measure, so as to read off thousandths of an inch of rain with ease. The bottle is filled as often as there are discharges from the rain gauge syphon, and the final excess or defect is measured with the graduated tube. The use of the bottle began on 31st July 1879 and continued till the 26th July 1884, when it was accidentally broken. An exact copy of it, which had been prepared beforehand, was then substituted, for the original bottle and is still in use.

Measurement and distribution of syphon discharges.—The discharges are measured daily, or oftener during heavy rainfall, and are, of course, always of an integral number. For each measurement the average value of a discharge is attributed to each of the intervals of time, shown on the rain curve, between pairs of successive discharges; and it remains then only to distribute this quantity for each filling of the receiving vessel, by means of tabulations of the ordinates of the rain curve. When, as is often the case, the rate of fall of the rain at the time of a discharge exceeds 1⅛ inch per hour, it is necessary to allow for the rain that enters the receiving vessel during the known time (16 seconds) of discharge, the allowance depending on the rate of rainfall, which is easily estimated for this purpose by noting, with the aid of an appropriate paper scale, the inclination of the rain curve immediately after the time of discharge. The aggregate of such allowances is deducted from a days (or other) measurement before dividing the quantity equally amongst the several intervals.

Determination of scale of rainfall ordinates.—The factor for converting ordinates of the rainfall curve into inches of rainfall was found by experiments in which a determined weight or volume of distilled water was poured into the receiving vessel, and the change of length of the ordinate produced thereby was carefully measured. In an experiment made on 6th May 1911, the quantity of water poured into the vessel was equivalent to ·480 inch of rain and the change of length in the ordinate ·470 of a true inch; whence the factor is found to be 1·021, which is applicable to all the rainfall registrations of the year 1911. In similar experiments made on the 26th May 1912, 24th April 1913, 29th May 1914, and 22nd May 1915, the factors so determined were 1·036, 1·026, 1·030, and 1·021 respectively which have however not been made applicable to the rainfall registration of the respective periods as if we adopt, as was done, the co-efficient unity (1·000) the greatest error possible in the registration would amount to less than ·02 inch. But this amount increases gradually to its maximum value ·02 as the ordinate increases from zero to ·50 inch and would be counterbalanced at one stroke when the discharge occurs.

The tabulations are made with the true-inch scale of the thermograph tabulating instrument, using the white line as datum; and the reading of this datum that corresponds to the reading ·000 of the rain curve, when the receiving vessel has just been discharged, is re-determined whenever the adjustment of the recording apparatus is disturbed. For this purpose an average is taken of a number of measurements for all of which the rain is falling very slowly at the time of the syphon's coming into action and for a short time longer. It is necessary to select such occasions because at times of heavy rainfall the curve has risen sensibly before the light has had time to make a distinct impression on the sensitive paper. The mode of tabulating is (1) to set the scale on the constant reading corresponding to the white line, (2) to move the sliding piece until the index is set upon the white line, and (3) to move the sliding bar till the index is set upon the curve, and then read the scale. By setting the paper carefully, so that a considerable length of the white line is practically paralled to the lateral motion of the frame, the repetition of the first two operations of tabulation is avoided until many hourly ordinates have been read; and then a new setting of the paper is made for another stretch of the white line.

(*b*) Seismological Instruments at Colaba, 1911 to 1915.

Milne's Seismograph.—This instrument, No. 12, supplied by R. W. Munro of London, was mounted in September 1898, in the small building formerly used for electrostatic observations which was materially altered to suit the requirements of a seismoraph installation. It consists of a single room 10 feet square with a double folding door on the south side and a single large window on the north side. It is 14 feet high up to the eaves with a gable roof, and is well ventilated by adjustable openings made in the walls near the ground and in the gable ends at the top. The pier is placed

in the middle of the room. Its foundations run 5½ feet below the flooring, at which depth a huge basalt boulder was struck, over which was laid a bed of concrete 5 feet square and 2 feet deep. This bed supports a mass of rubble masonry 4 feet square and 1½ feet deep, which finally carries a brick pillar 1½ feet square and 5½ feet high. The pillar is plastered with cement and carries a ½ inch marble slab at the top. The special feature of this horizontal pendulum seismograph is a boom about 37 inches long consisting of a light aluminium rod supported at two places. One end abuts against an adjustable pivot or a needle point projecting from the base of the "vertical," and at a distance of about 4·3 inches, from this end it is held in horizontal position by a platinum wire with a piece of unspun silk attached at the end, which passes over the "vertical" and is held in position there by suitable adjustable screws at the top. This piece of unspun silk is attached to the platinum wire at the top to secure free motion of the boom; and to steady the movement of the boom which is very light, as also to balance the weight of the outer end of the boom and to obtain the "steady" mass a balance weight is suspended on a stirrup fixed on the boom at about 4 inches, from the pivot end. The boom carries at the outer end a rectangular plate with a short slit cut parallel to the boom through which light from a lamp is reflected by a suitable mirror on to the film in the recording box which has a corresponding slit at right angles to the former, thus allowing only a point of light to affect the film. The distance of this slit from the pivot point is 37·3 inches.

The base of the "vertical" is formed by an iron triangular bed plate with three levelling foot-screws. One of the screws is finely divided with a pitch of 0·5 mm. which serves for final adjustment. The bed plate is so placed on the pillar that two screws (including the adjustment foot-screw) are located due E.—W., while the third points to North. The distance between the first two is exactly 150 mm. and therefore a complete turn of the adjusting screw raises or lowers that end by 0·5 mm. or through an angle $= \tan^{-1}\frac{1}{300}$. A lever attached to this screw with a scale enables it to be turned through 1°, 2°, or any other fraction of a complete turn. This, with the usual sensibility of about 5·0 mm. for a 1° turn of the screw, allows of the determination of the tilt up to 0·2″ of arc measured by a deflection of 0·5 mm. on the seismogram. The clock-work drives a roller, which pressing slightly against another friction roller allows of the sensitive film being carried between them at a uniform rate of about 59 mm. per hour. A small watch placed on the recording box, with its long minute hand carrying a small plate which extends to about 11 mm. over one end of the slit of the recording box, produces an eclipse every hour at 30 minutes past the hour cutting off the light at that end of the slit. Since December 1913 time is marked on the seismograms by an electrical contact clock, installed in the Colába Seismograph room in connection with an electro-magnet and an eclipse fan which cuts off light for about half a minute at the exact full hour of Bombay mean time. By carefully watching the beginning and end of the eclipse by means of a chronometer, the exact time of the centre line of the white mark left on the sensitive film by the eclipse can be easily read off on the seismogram. Air tremors are frequent and troublesome at night especially during the winter months. But the precaution of regulating the temperature and draught in the room by heating the room by means of lamps or stoves initially suggested by this Observatory after a long series of experiments as a successful method of eliminating this form of disturbances, has proved fairly effective, and the traces are nearly always free from this source of vitiation.

*The Colaba Seismographs.**—The Seismographs designed and constructed locally were installed in the building formerly known as the small magnetic room altered to suit the requirements of the installation till April 1912 when the old bulding was demolished and a new one was contructed on the same site. They are mounted on an isolated pillar 20 by 18 inches and 7 feet high with its foundation on a rock. No. 1 is oriented N.—S. so as to record E. – W. movements, while No. 2 is oriented E.—W. to record. N.—S. movements.

The essential parts of the two horizontal pendulums as finally devised consist of a metal boom about 14 inches long, one end of which carries a steel point abutting against a shallow cup of agate fixed to a heavy screw in the pillar at a point about 74 inches below its top. The boom at its other end carries a heavy weight (70 lbs.). The pillar at the top carries a thick iron slab in which are firmly bolted the slow motion adjustment screws, the steel bearings and the finely balanced pivot which receives the tie from the boom. The weight at the other end of the boom carries a moveable polished metal pin with a device to allow for the adjustment of the zero etc., which receives a close but just fitting fork attached to a long thin tapering glass rod about 8 feet long which carries at its outer end an agate bearing to receive a fine lightly balanced pen (crow quill) on a knife edge, which gives the record in glycerine ink. The pen is easily replaced by a style attachment whenever it becomes necessary for experimental purposes to secure a record on smoked paper. The magnification is about 8 times. The recording cylinder (5 inches in diameter) runs on a helical axis in connection with clock-work, and while completing one revolution in one hour, advances $\frac{1}{10}$ inch, which

* NOTE.—The recording arrangements of these instruments have for the purposes of investigation, often and again been altered from pen and ink records to charts on smoked paper with style, suitably modified in each case to suit the requirements of the investigations.

enables a continuous record of twenty-four hours being taken on the chart. With a suitable electro-magnet and connection with an electrical clock time marks are recorded on the paper every minute, which with the regular motion of the cylinder and the clock have been found to give sufficiently accurate time for all practical purposes.

The instrument is brought into adjustment by the lower pivot screw which moves in and out, enabling the period to be regulated, while the adjustment screw at the top of the pillar, giving the slow motion to the point of attachment of the tie from the boom, allows the zero to be properly adjusted. The vertical distance between the points of attachment of the horizontal pendulum is 74 inches, and the distance between two consecutive threads of the adjustment screw traversed by a *complete* turn of the screw is $\frac{1}{14}$ inch from which the angle of the corresponding tilt is obtained by calculation. After suitable adjustment of the recording lever, pen, etc., the displacement of the pen corresponding to a tilt due to a complete turn or a fraction of a turn of the screw gives the sensibility of the instruments. For accurate work, with delicate instruments of this type which involve considerable friction, it was found advisable *every* day, at the time of change of paper, to measure the sensibility to tilt and to ascertain that this remained practically constant. As the instrument has been constructed locally, it was thought undesirable to use the upper adjustment screw oftener than was absolutely necessary, its use being restricted only to the correction of zero. The following device, therefore, is adopted. The pillar is provided with a brass bar oriented E.—W., 1·5 and 0·4 inch in section and about 5 feet long, which is embedded in the pillar passing horizontally through it and about a foot below the top. A similar circular bar about 40 inches long is placed at right angles to the former and oriented N.—S. The arms of these two bars which project 21 inches and 10 inches respectively for the No. 1 and the No. 2 seismographs from the face of the pillar are daily used for supporting, for a few seconds, a weight of 7 lbs. This weight placed at a certain distance on the arms produces a definite tilt in the pillar in the direction of the weight. This has been very accurately ascertained periodically from a series of careful experiments and equals 0·57 second in arc in the case of the No. 1 seismograph and 0·31 second in the case of the No. 2 seismograph. The weight of 7 lbs. is therefore used to produce this known tilt from which the displacement of the pen on the paper enables the sensibility of the instrument to be effectually controlled.

Seismograph for recording vertical movements.—This instrument was mounted in a specially constructed small building to keep the variation of temperature as small as possible. It has finally been removed to the underground magnetograph room. The instrument consists of a finely balanced lever with unequal masses at almost proportionate distances from the fulcrum. The lever is made to carry on one of its arms an agate plane supporting the knife edge at one end of a small lever, to the other weighted end of which is attached a fine Ayrton Perry spring fixed at top to a suitable support of the instrument. The spring thus remains under a small tension and a mirror is attached to it at its lower end and the beam of light which falls upon the mirror is properly focussed on the sensitized paper in the recording box. The large balance is adjustable to a period of 15 to 40 seconds, the free motion of which is not interfered with as the Ayrton Perry spring is attached to the auxiliary balance. To improve the record of this instrument several modifications in the details of the seismograph were made one of which adopted eventually was the removal of the auxiliary balance and the attachment of a fine steel wire spring some four inches long directly between the Ayrton Perry spring and the heavier end of the main balance, but without much success, as the friction in the balance pivots and attachment device was found to be much too great and fatal to the registration of minute movements. The instrument hence while efficient enough to record traces of near quakes was not sensitive enough to pick up the small movements of distant earthquakes. It was finally discontinued from 21st October 1915.

The same paper takes another record to register the actual tilt of the ground. A lead tube 3·8 inches in diameter is laid E.-W. in the floor of the magnetograph room. The horizontal length of the tube is 22 feet and the ends are turned up vertically through properly constructed brick pillars 3 feet high at each end. The end of the tube which comes through the pillar at the east end is protected by a loosely fitting cover, while the west end of the tube opens just under the base plate of the recording instrument which is placed on the west pillar. The tube is filled with kerosine oil and thus practically forms a geodynamic level. A float just heavy enough to sink in the oil is properly adjusted and suspended from the support of the instrument by a very delicate Ayrton Perry spring kept under tension by the residual weight of the immersed float sufficient to produce a rotation of about 180° of the mirror. From the area of the tube and its length the tilt can be ascertained experimentally by the addition of a known quantity of oil which causes a certain displacement of the beam of light on the paper and is constant for the existing factors for a float of a particular diameter. The present arrangement of float, etc., provides for a sensibility equivalent to a tilt of 0·4″ or a vertical change in ' h ' of ·0005 inch, for one millimeter, and the instrument is sensitive enough to pick up tilt movements of even distant earthquakes. Time marks are secured on the

traces by a small chronometer watch in electrical connection with an electromagnet which by means of an occulting fan, cuts off light for about a minute and a quarter every hour. In December 1913 the watch was removed and the same electrical clock which marks time on the Milne's seismograms, was connected up with this instrument. The scale as in Milne's seismograms is about 59 millimeters long for one hour and does not admit of greater accuracy in the determination of time than of 0·1 minute. To allow of more accurate determination of time, arrangements were made in August 1915 to secure a more open scale and the record was run about 2½ times faster so that 157 millimeters could be paid out in one hour.

The Omori Ewing Seismograph.—This horizontal pendulum seismograph was received in November 1907 and has been installed, oriented E-W, on an isolated pillar in a small wooden building to the east of the Magnetometer office. The essential parts of the instrument are in the main as described in the Colaba Seismographs. The cast iron base stand which is about 4 feet high, with a heavy ample base, supports a pendulum mass of about 75 lbs. by steel wires from the top. The length of the boom from the pivot to the centre of gravity of the steady mass is 2·0 feet, and the distance of this pivot from the point of attachment of the wires at the top of the stand is 3·42 feet. A fork and lever attachment in connection with the mass allows the movements to be magnified from 20 to 40 times. The lower magnification (20) has been used for the records during the period. The traces are taken on a smoked paper with a style, and a suitable device for time marks every minute is provided by an electro-magnet in electric connection with a standard clock which simultaneously marks time on this and on the Colaba (N-S) Seismograms. In May 1915 the instrument was slightly modified and the iron base stand was lifted up and mounted on a stone pillar so as to increase the vertical height of the pendulum from 41″ to 81″. This allows the pendulum to be more readily and easily made to swing freely and also to be adjusted to slow periods of 30 seconds and more.

(*c*) Magnetical Instruments at Colaba, 1911 to 1915.

Kew Unifilar Magnetometer.—Magnetic work was stopped at Colaba from the 1st April 1906, and since then observations of declination only, taken once a month about the 15th, have been continued. A description of the standard instrument No. 23 by Elliott Brothers, with which the observations of Declination for the period 1911 to 1915 have been taken, will be found on pages xxxiii to liii of the Introduction to the "Bombay Magnetical and Meteorological Observations, 1865—1870"; the description includes also an account of the situation of the instrument, of the nature of the observations taken with it—with examples of observation and computation forms filled up with the figures of actual observations—and of the formulæ of reduction and the constants involved in them.

(*d*) Magnetical Instruments at Alibag, 1911 to 1915.

Magnetometers.—Two magnetometers have been under observation regularly during the period. Magnetometer No. 7 by Cooke and Sons which is the standard instrument at Alibag, is of the ordinary type of Kew pattern instruments but is modified and improved in several important details. The telescope is about 8″ in focal length with two eye pieces of low and high power. It carries a level and is pivoted on a transverse axle as in a transit to allow it to be used to a certain extent for motion in the vertical plane. The diaphragm instead of carrying the usual cross spider lines is filled with an optically pure glass on which are engraved two scales vertically and horizontally. The vibration magnet which is carried in a light aluminium stirrup has a cross engraved on a glass at its south end, the north end carrying the lens. The stirrup with the magnet in it is suspended by a phosphor bronze ribbon instead of the usual silk fibres, by means of clip-chucks. A finely divided plummet is provided, the scale of which is brought into focus and read with the telescope through a suitable lens brought in position for the time in front of the object glass. This arrangement ensures a more or less perfect elimination of the torsion of the suspension ribbon allowing of a more accurate determination of the residual torsional error than is possible in the Kew Pattern instruments. As the telescope diaphragm carries the scale, the usual Kew type mirror attachment to the deflection magnet and the special ivory scale are omitted and instead the stirrup with its magnet is made to carry below the magnet an aluminium collimator tube with a lens at the telescope end and a piece of glass engraved with cross lines at the other. The deflection bar is not divided as in the Kew instruments but a certain number of holes is accurately bored in its upper edge at exact distances 22·5 c.m., 26·25 c.m., 30·0 c.m., 35·0 c. m., and 40·0 c.m., measured from the centre of the instrument. The carrier of the deflector (vibration) magnet which rides on the bar during deflection experiments has a small metal plug protruding centrally from its base. This plug closely fits the holes in the bar and the operation of setting the magnets hence at the various distances on the bar does not require any careful adjustment as in the Kew type instruments.

The other instrument is No. 3 by the Cambridge Scientific Instrument Company and is of the usual Kew pattern.

Instrument No. 7 is observed on the second floor of the tower of the magnetic office, while instrument No. 3 is observed on the first floor, each instrument being permanently allowed to stand on its own pillar on the respective floors. The result of a long series of comparison of the instruments showed that after the application of the full distribution correction No. 7 read 2γ higher than the Colaba Standard Magnetometer by Elliot while No. 3 gave the same value as the Colaba standard. To ascertain how far the difference due to site affected the absolute determinations on each floor, a set of careful comparison observations was taken in 1917 with Magnetometer No. 7 and Inductor No. 41, on the two floors alternately. The results showed that Horizontal Force read lower by 3γ, Easterly Declination higher by $1'\cdot4$ and Inclination lower by $0'\cdot4$ on the second floor than on the first floor. The site differences obtained initially in 1904 were $1'\cdot4$ for D and practically nil for H and I, Magnetometer No. 7 and Dip Circle No. 160 being then used for the purpose. As the differences are very small a much larger series of observations is clearly essential and the values of site differences can only then be determined and adopted finally.

The instrumental constants adopted in the reductions are as follow:—

Magnetometer No. 7.

Induction co-efficient $\mu = 7\cdot82$ or $\log \mu = 0\cdot89321$.

$\log \pi^2 K = 3\cdot39931$ and $3\cdot39981$ at 0°C and 50°C respectively.

Auxiliary inertia Cylinder : length = 9·288 cms.;

diameter = 1·017 cm ;

mass = 63·822 grammes.

The temperature correction for decrease in the moment of the collimator magnet is equal to $\cdot000396\,(t-0°)+\cdot00000088\,(t-0°)^2$, t representing the temperature in centigrade scale at which the observation is made.

In the graduations of the deflection bar the true distances at 0°C corrected for bending, corresponding to apparent distances 22·5, 26·25, 30, 35, and 40 cms. are respectively 22·493, 26·242 29·994, 34·991 and 39·983 cms.

The angular value of one scale division in the telescope = $1'\cdot363$.

The adopted values of the distribution constants are $P = +\,9\cdot549$ and $Q = -\,569\cdot0$ and $\log 1/\,(1+\frac{P}{r^2}+\frac{Q}{r^4}) = 9\cdot99283$ for 22·5 cms. and $= 9\cdot99572$ for 30·0 cms.

The attached thermometer of the instrument has no correction from 0° C. to 20° C. and from 30° C. to 45° C. ; the correction at 25° C. is $-\,0°\cdot1$ C.

Magnetometer No. 3.

Induction co-efficient $\mu = 7\cdot95$ or $\log \mu = 0\cdot90037$.

$\log \pi^2 K = 3\cdot44108$ and $3\cdot44160$ at 0° C. and 50° C. respectively.

Auxiliary inertia cylinder : length = 10·001 cms.

diameter = 0·989 ,,

mass = 65·041 grammes.

The temperature correction for decrease in the moment of the collimator magnet is equal to $\cdot000381\,(t-0°)+\cdot00000105\,(t-0°)^2$, t representing the temperature in centigrade scale at which the observations are made.

In the graduations of the deflection bar the true distances at 0° C. corrected for bending, corresponding to apparent distances 23, 25, 30, 35, 40 and 45 cms., are respectively 22·995, 24·995, 29·994, 34·993, 39·991 and 44·990 cms.

Deflection apparatus, angular value of one scale division = $61''\cdot5$.

Collimator magnet, ,, ,, ,, ,, = $1'\cdot91$.

The adopted values of the distribution constants are $P = +\,2\cdot660$, $Q = -\,1033\cdot5$ and $\log 1/\,(1+\frac{P}{r^2}+\frac{Q}{r^4}) = 9\cdot99942$ for 23 cms., and $= 9\cdot99927$ for 30 cms.

The corrections for the thermometer attached to the instrument for vibration observations are $-\,0°\cdot2$ C. from 5° C. to 40° C and $-\,0°\cdot1$ C. at 45°C. In the case of the thermometer for deflection observations the corrections are $-\,0°\cdot1$ C. at 5° C. and 45° C. and $-\,0°\cdot2$ C. from 15° C. to 40° C.

Dip Circle.—Dip Circle No. 160 by the Cambridge Scientific Instrument Company is of the usual Kew pattern circles. Observations with this instrument have been made periodically in the room on the 2nd floor of the observation tower. It is installed on a separate pillar by itself. The reading of the azimuth circle of the instrument adopted for the place was 66° 15′. The position of the pillar was altered from 17th April 1908 for which the adopted reading is 67° 24′.

Observations with this instrument were only supplementary and the Dip needles used were No. 1 and 2 by Dover during the year 1911 and No. 1/05 and 2/05 by Dover (Charlton) from January 1912 to May 1914.

Earth Inductor.—This instrument No. 41 by Schulze of Potsdam with Galvanometer No. 200 by Plath was installed on specially constructed pillars in the room on the 2nd floor of the observation tower in May 1908. The galvanometer is mounted on a separate pillar to the south of that which carries the Inductor. A little to the right on the same pillar and in the line of the magnetic meridian passing through the axle of the Inductor coil, is fixed the rotation stand. The arrangement allows the observer to watch the movement of the needle conveniently through the galvanometer telescope while the coil is being rotated from the stand on the right of the observer. The rotation stand is of special construction. It is adjustable in direction and height to allow of the flexible tube from the Inductor to be attached to it at the correct distance and angle from the Inductor, and is specially devised to protect the Inductor when it is clamped to the angle of inclination and rotated, from any undue strain of the flexible tube. The Inductor consists essentially of a delicately balanced coil, the axle of which is adjustable to the necessary degree of accuracy both in azimuth and in altitude. The horizontal circle admits of an adjustment of the axis of the coil in azimuth to one minute of the true declination, while the vertical circle with its micrometer motion screw, allows the inclination to be read up to 1·5 seconds of arc. A gear with a suitable flexible tube is provided to set the axle of the coil in rapid rotation.

This motion induces currents in the coil as it cuts the lines of force of terrestrial magnetic field in which it rotates. The alternate currents so generated are duly righted by means of a delicate commutator and the direct continuous currents are conducted by wires to the sensitive mirror galvanometer by Plath. It is obvious that when so rotating if the axle of the coil adjusted in declination is inclined to the horizon coincident with the exact angle of inclination, no currents can be induced as every point of the coil while rotating, is carried round the same line of force, while at any other angle as the points cut different lines of force, currents would be generated and detected with the aid of the galvanometer. The larger the departure of the inclination of the axle of the coil from the true dip, the stronger would be the induced currents and greater would be the deflection of the needle of the galvanometer. The mirror galvanometer with its four coils and battery of directing magnets and the delicate astatic needle suspended by a very fine quartz fibre, allow of very sensitive adjustments to be made for the detection of the feeble currents generated in the coil when the angle of inclination of the coil is closely near to the true dip, a very small excess or defect in the angle being indicated respectively by a positive or negative deflection of the galvanometer needle. The true co-dip is given by the difference of the circle readings for the axis of the coil in the true vertical position and in the inclined position corresponding to the exact angle of the dip. In this 'null' position with a fairly rapid but constant and steady motion of the coil no current can be induced as shown by the undisturbed condition of the galvanometer needle.

To complete the duplicate installation of all important magnetic instruments which is essential both for accuracy and check work, inductor No. 108 by Otto Toepfer was ordered out and installed on the first floor in May 1914, and was under regular observation every alternate day during the period. The instrument is precisely of the same type as the Schulze's inductor described above, the only notable difference being in the suspension arrangement of the galvanometer needle, which is carried in this instrument by a silk fibre.

The Magnetographs.—The three magnetographs in use at Alibag are by Watson. They are mounted on isolated pillars in the room of the magnetograph building, a description of which is given in the observatory volume for 1906 to 1910.

The magnet of the horizontal force instrument is made up of a system of three slender bar magnets arranged vertically on a light central aluminium piece. This arrangement of the magnet system instead of one single large magnet gives distinct advantages in respect of mass and magnetic moment while contributing also to a reduction of the temperature co-efficient. The carrier of the magnet system is supported by a very fine quartz fibre suitably attached to the torsion head with a scale and clamping screw for the adjustment and measurement of the angle of torsion. The centre piece of the magnet system carries a light aluminium carrier made of two cross bars designed to receive a mirror. The bars carry adjusting screws by which the mirror can be finally adjusted about a vertical axis in relation to the magnetic axis of the system of magnets, as also about a horizontal axis. Just below this is fixed to the base plate of the instrument, another mirror which serves the purpose of securing the zero or base line trace. This mirror is also adjustable in azimuth and verticality. The magnet system swings in a massive copper block which forms the frame of the instrument, within a small chamber of the same form as the magnet system, but just large enough to allow free motion to the magnets. This arrangement provides thus not only for an effective damper but also secures uniformity of temperature of the magnets and the attached thermometer. The bulb of the thermometer is designed to

lie in as close a proximity of the magnet system as possible; and as both are enclosed in and are closely surrounded by the copper frame, the thermometer can be relied upon to register the true and actual variations of temperature of the magnet system, which is so vitally essential for requirements. The thermometers are specially constructed with open scales, 1° F. being equal to a length of about 0·3 inch so that 0°·1 F. can be read off accurately enough for all practical purposes. The side of the metal box forming the frame work of the instrument, which faces the lamp slit and the recording apparatus, carries a plano-convex lens of 165 cm. focal length.

In the declination magnetograph all the detailed arrangements are the same as described above, but the suspension of the magnet in this instrument is secured by a fine ribbon of phosphor bronze instead of a quartz fibre. The magnet system here consists of nine slender magnets arranged in a circle of about 12 mm. diameter.

These two instruments recording H and D variations, the former oriented North-South and the latter East-West, have their recording apparatus installed on a single central pillar and are run together by the same clock. The drums carrying the sensitive bromide paper are fitted in well closed wooden boxes to facilitate the removal and replacement of the sensitive papers in a dark room. The tube which connects the recorder and the instruments, carries at the end towards the former a glass scale and moveable mirror which can be lowered into position for eye observations. The lamp and slit, as is usual in all such instruments, are devised to move through a distance of about ¾ of an inch to allow of two days' curves being taken on one and the same sheet of paper. The beam of light as it passes through the slit traverses the tube and enters the magnet chamber through the plano-convex lens. As the two mirrors are adjusted at slightly different angles of inclination, the beam is separated after reflection here into two and repassing the lens and tube they enter the recording drum through a fine slit which being very close to the surface of the paper allows sharp images of the slit as reflected from the magnet and zero mirrors to be received on the paper. Arrangement for the introduction of a condensing cylindrical lens is provided with these instruments to allow of less sensitive papers to be utilized on the magnetograph, but as the image is appreciably less sharp than in the previous arrangement and as no other difficulties have compelled the use of the lens* it has not been used except in the case of the V. F. Magnetograph where it has been used uninterruptedly from April 1914.

The principal details of the Vertical Force Magnetograph are in the main the same as in the other magnetographs. The magnet system here consists of eight slender steel rods, each 10 cms. long and 0·2 cm. in diameter, fixed in two horizontal rows of four each in a central frame made of aluminium. The agate knife edge and an adjustable mirror lie between these rows on the frame which carries also a short thin vertical rod above on which a small weight is screwed, by raising or lowering which the final adjustment of the centre of gravity and of the sensitiveness of the balance, can be made. The frame carries a light vane and a counterpoise horizontally for adjusting the balance. A zinc rod with small moveable weights is screwed into a small bar which is attached to two of the magnets, but does not touch the central frame through which it passes freely as the hole is kept wide enough for this. With proper adjustment of these weights carried by the zinc bars the readings of the magnet balance are made nearly independent of temperature variations. The outer box which is of metal, carries centrally on a short pillar the agate plane for receiving the agate knife edge of the magnet system, which has a suitable device with a lever and hole, and slot and plane arrangement for lifting the magnet off and lowering it on the agate plane exactly in the same position as before. The box also contains five copper plates arranged vertically side by side as close as possible but just sufficiently apart to allow the slender magnets to move freely between them. These serve as effective dampers. The scale co-efficients of the force magnetographs are derived periodically from deflection observations performed on the instruments with deflectors as already referred to, at 100 cms. distance in the case of H. and at 75 cms. distance in the case of V. magnetograph. Upto May 1912 the observations were taken every week and the mean of the four or five such weekly determinations was used in the reductions. After that date observations have been taken every fortnight and the value used for any month is derived from six fortnightly determinations about the month. The deflector used up to May 1908 was magnet No. 137 while after that date magnet No. 3 was employed for this purpose. The values of the co-efficients used in the reductions are given below :—

Scale co-efficinets of H. F. Magnetograph for 1 cm. of ordinate on the photographic paper.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	46·3	46·3	46·2	46·1	46·1	46·1	46·1	46·0	45·9	45·8	45·8	45·9
1912 ..	45·8	45·7	45·9	45·7	45·7	45·7	45·6	45·5	45·5	45·4	45·4	45·5
1913 ..	45·5	45·4	45·3	45·3	45·3	45·2	45·2	45·2	45·8	46·3	46·3	46·3
19 4 ..	46·3	46·3	46·2	46·2	46·1	46·1	46·0	46·0	46·0	45·9	45·9	45·9
1915 ..	46·0	45·9	45·8	45·8	45·6	45·6	45·6	45·7	45·6	45·6	45·6	45·6

γ= ·00001 C. G. S.

* The formula given below for the scale co-efficient will slightly be modified by the introduction of the additional lens, in respect of the Declination Magnetograph.

Scale co-efficients of V. F. Magnetograph for 1 cm. of ordinate on the photographic paper.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	92·7	92·6	92·6	93·1	93·3	93·0	93·0	92·9	92·8	93·2	93·0	92·9
1912 ..	93·0	92·7	93·0	93·2	94·5	94·2	93·8	93·5	93·6	93·6	93·8	93·6
1913 ..	93·5	93·3	93·3	93·6	93·8	94·0	93·9	93·5	93·4	93·4	93·5	93·5
1914 ..	93·2	93·2	93·2	93·4	93·7	93·9	93·8	93·6	93·6	93·8	93·9	93·6
1915 ..	93·3	92·9	93·2	93·2	93·6	93·7	93·5	92·9	93·1	93·2	93·4	93·4

1γ = ·00001 C. G. S.

The several measurements necessary for the determination of the co-efficient of the Declination Magnetograph are as follows :—

Distance D from the lens to the edge of the recording cylinder = 167·98 cms.

Distance d from the lens to slit = 156·29 cms.

Distance m from mirror to lens = 1·744 cms.

Thickness of the cylindrical lens t = 0·33 cms.

The change due to 90° of torsion of the phosphor bronze ribbon was found to be 1·00 cm. on the paper whence the torsion co-efficient $1 + \frac{H}{F}$ works out as 1·00530.

The scale co-efficient for 1 cm. of ordinate hence as given by the formula

$$a = \frac{1}{2D}\left(1 + \frac{m}{\frac{2Dd}{D-d} + m}\right)\left(1 + \frac{H}{F}\right)$$

works out as 10′·28 which has been used in the reduction during the period.

The temperature co-efficient of the Horizontal Force Magnetograph has been determined by heating experiments and its adopted value is ·000036 C. G.S. for 1° F.

The temperature co-efficient of the Vertical Force Magnetograph was found in the same experiments to be practically nil as no appreciable change in force after allowing for the actual diurnal change, could be definitely ascertained as being due to temperature effects.

The entries in tables of observations of absolute Horizontal Force with instruments No. 7 and No. 3 given in tables Nos. 1*a* and 1*b* for each year are copied directly from the observation books and the computation forms. Monthly means of observed moments of magnets and the differences in the values of H derived from two deflection distances (22·5 cms. and 30·0 cms. for instrument No. 7 and 23·0 cms. and 30·0 cms. for instrument No. 3) given in columns 15 and 18 of the tables, have been collected in tables 1 to 4 given below. They serve to exhibit at a glance how the magnetometers have behaved during the period. In the natural process of decay the moment of the magnets which in ideal conditions and circumstances ought to indicate a slow and steady loss conforming to some simple law, discloses, as will be seen from the tables, two fairly heavy and sudden dislocations in the series for instrument No. 7—one about May 1911 and the other about May 1915, the latter being the larger of the two. Two similar but heavier dislocations occur in the series for instrument No. 3 in June 1912 and May 1915. A reference to tables 2 and 4 also shows that the distribution conditions appear to be slightly affected in the No. 7 instrument in 1911. They are however markedly affected in instrument No. 3 in 1912 and there is also a suspicion that the distribution conditions of this instrument initially derived and adopted at Colaba, were slightly affected in the transit of the instrument from Colaba to Alibag as evidenced in the series in table 4 from 1904 to 1912. The unsteadiness of magnet No. 3 in this respect is also marked in the data of subsequent years which need careful examination. In tables 5 and 6 are given the base line values (observed and calculated) of the Horizontal Force Magnetograph derived independently from the results of the two magnetometers, and in tables 7—9 appear the differences between the observed and calculated base line values which show how far the auxiliary instrument can be depended upon to run parallel to the standard instrument No. 7 in the measurement of the absolute values of H. Small corrections to the absolute values due to this change in the distribution conditions of the magnets are clearly necessary and will have to be applied later to the series after full investigation.

Tables 10 and 11 give the base line values of the Declination Magnetograph standardised independently by instrument No. 7 and No. 3 respectively, while table 12 shows the differences. It will be seen that the average Declination (Easterly) derived from observations with instrument No. 7 on the top floor, is greater by 0′·55 than observations on the first floor taken with instrument No. 3. But as the adopted site difference makes the second floor observations higher by 1′·4 than on the lower floor, the instrumental difference is indicated at 0′·85, instrument No. 7 giving smaller easterly declination than instrument No. 3.

TABLE 1.—*Mean monthly observed values of the moment of the vibration magnet of Magnetometer No. 7.*

Years.	Months.												Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1904 ..	941·98	941·44	941·65	941·49	940·88	941·15	940·96	940·86	940·73	940·88	940·69	940·39	941·06
1905 ..	940·57	940·61	940·46	940·30	940·16	939·86	939·66	939·79	939·58	939·68	939·48	939·65	939·98
1906 ..	939·53	939·59	939·55	939·45	939·39	939·41	939·45	939·52	939·58	939·49	939·37	939·51	939·49
1907 ..	939·42	939·48	939·50	939·35	939·31	939·25	939·25	939·33	939·33	939·24	939·22	939·31	939·33
1908 ..	939·37	939·33	939·30	939·22	939·07	939·16	939·10	939·18	939·16	939·23	939·22	939·25	939·22
1909 ..	939·19	939·32	939·18	939·07	939·07	939·00	939·08	939·12	939·10	939·06	939·06	939·22	939·12
1910 ..	939·11	939·12	939·05	939·02	938·92	938·77	938·92	938·96	938·87	938·74	938·92	938·94	938·94
1911 ..	938·95	938·93	938·96	938·73	938·72		938·24	938·36	938·32	938·27	938·27	938·33	
1912 ..	933·38	938·40	938·43	938·18	938·15	937·95	938 14	938·17	938·00	938·10	938·14	938·14	938·18
1913 ..	938·20	938·21	938·18	937·99	937·98	937·90	937·89	937·89	938·00	938·06	938·03	938·02	938·03
1914 ..	938·12	938·09	938·08	937·98	937·86	937·78	937·87	937·91	937·86	937·82	937·80	937·89	937·92
1915 ..	937·99	937·89	937·84	937·77		936·53	936·59	936·46	936·56	936·65	936·51	936·61	
1916 ..	936·60	936·61	936·45	936·67	933·57	936·39	936 47	936·62	936·59	936·51	936·60	936·63	936·56
1917 ..	936·61	936·60	936·67	936·56	936·31	936·41	936·44	936·32	936·42	936·53	936·45	936·52	936·49

TABLE 2.—*Mean monthly differences in the value of Horizontal Force determined from observations with instrument No. 7 at the two deflection distances of 22·5 cms. and 30·0 cms.*

Unity=1γ.

Years.	Months.												Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1904 ..	0·0	+0·6	+0·3	+0·9	+1·4	+0·5	−0·9	+1·0	−0·1	+1·4	0·0	−0·5	+0·4
1905 ..	+1·0	+1·2	+0·7	−0·1	0·0	+1·0	−1·5	−0·9	−1·5	−0·1	+0·9	+1·0	+0·1
1906 ..	−0·9	+1·0	+0·5	−0·7	−0·5	−0·1	−0·6	−0·8	+2·6	−0·3	−0·1	+1·0	+0·1
1907 ..	+1·1	+1·2	+1·9	+1·1	+1·4	+0·5	+0·1	−1·5	−1·0	−0·6	+1·5	+1·1	+0·6
1908 ..	−0·6	+0·4	+0·1	+0·8	+1·9	+0·9	+1·0	−2·0	−1·1	−0·6	−0·7	−0·2	0·0
1909 ..	−2·7	−1·5	+1·2	+1·6	+1·4	+1·4	−0·1	−0·9	−0·6	−0·2	0·0	+0·1	0·0
1910 ..	−0·1	−0·6	+1·0	+1·4	+2·0	+3·5	+1·6	−1·4	−1·6	+0·7	+0·3	−0·4	+0·5
1911 ..	+1·7	+1·9	+1·2	+1·7	+1·2	+3·8	+0·6	+0·5	+1·7	+1·4	+0·2	+1·5	+1·4
1912 ..	+3·0	+2·0	+0·8	+0·2	+1·1	+0·5	+0·7	+1·0	+0·5	+2·7	+2·1	+2·2	+1·4
1913 ..	+2·7	+2·5	+2·5	+1·1	+1·5	+2·1	+2·7	+1·8	+2·4	+2·9	+2 6	+2 0	+2·2
1914 ..	+2·7	+3·0	+3·3	+3·2	+4·6	+2·2	+2·0	+0·7	+1·8	+1·7	+2·7	+3·2	+2·6
1915 ..	+1·9	+2·1	+2·5	+1·5	+4·5	+4·2	+0·9	+1·4	+1·3	+1·4	+2·7	+2·9	+2·3
1916 ..	+3·4	+3·6	+2·5	+2·7	+2·7	+1·6	+0·4	+0·7	+0·1	+1·9	+0·7	+2·6	+1·9
1917 ..	+2·7	+2·2	+3·1	+2·5	+0·8	+1·0	+1·9	+0·6	+0·6	+0·8	−0·2	+2·0	+1·5

TABLE 3.—*Mean monthly observed values of the moment of the vibration magnet of magnetometer No. 3.*

Years.	Months.												Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1904 ..	926·62	925·46	925·20	925·21	924·78	924·81	924·42	924·23	923·99	923·79	923·53	922·99	924·59
1905 ..	922·96	922·78	922·76	922·51	922·32	922·11	921·57	921·65	921·39		918·84	918·87	—
1906 ..	918·95	918·80	918·87	918·73	918·72	918·61	918·47	918·58	918·30	918·44	918·45	918·49	918·62
1907 ..	918·52	918·35	918·30	918·29	918·38	918·29	918·22	918·17	918·10	918·26	918·09	918·12	918·26
1908 ..	918·03	917·98	918·01	917·95	917·84	917·68	917·62	917·66	917·65	917·58	917·70	917·63	917·61
1909 ..	917·68	917·61	917·50	917·54	917·41	917·32	917·25	917·20	917·11	917·28	917·27	917·32	917·37
1910 ..	917·16	917·10	917·15	917·15	916·96	916·79	916·78	916·69	916·73	916·76	916·77	916·71	916·90
1911 ..	916·77	916·64	916·54	916·46	916·45	916·36	916·42	916·31	916·28	916·28	916·32	916·20	916·42
1912 ..	916·32	916·21	916·15	916·12	915·88		911·23	911·19	911·16	911·23	911·12	911·05	—
1913 ..	911·02	911·07	911·02	910·95	910·81	910·73	910·68	910·63	910·52	910·58	910·55	910·57	910·76
1914 ..	910·40	910·36	910·30	910·29	910·41	910·11	910·34	910·01	909·91	909·95	909·91	909·82	910·15
1915 ..	909·93	909·84	909·81	909·68		906·48	906·28	906·39	906·28	906·30	906·17	906·21	—
1916 ..	906·12	906·06	905·92	906·20	906·09	905·96	905·99	905·88	905·84	905·76	905·72	905·79	905·94
1917 ..	905·77	905·83	905·33	904·83	905·11	904·75	904·68	904·03	904·16	904·62	904·67	904·64	904·87

TABLE 4.—*Mean monthly differences in the values of horizontal Force determined from observations with magnetometer No. 3 at the two deflection distances of 23 cms. and 30 cms.*

Unity = 1γ

Years.	Months.												Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1904 ..	+4·1	+2·6	+3·1	+4·0	+3·6	+1·1	+5·2	+2·7	0.0	+0·6	+0·3	+2·5	+2·5
1905 ..	+0·4	−0·2	+3·5	−0·2	+1·3	+0·5	−0·2	−0·5	−0·9	−0·9	−0·4	−0·4	+0·2
1906 ..	+1·7	+2·0	+2·0	+0·6	+1·7	+0·1	+2·1	+5·1	+8·5	+2·2	+1·1	+0·7	+2·3
1907 ..	+1·7	+2·9	+3·6	+3·3	+4·0	+4·6	+4·8	+5·1	+3·8	+1·6	+2·2	+0·7	+3·2
1908 ..	+2·0	+1·9	+1·5	+3·6	+4·4	+5·5	+2·9	+2·7	+3·6	+2·6	+2·0	+0·4	+2·8
1909 ..	+1·1	+1·2	+2·8	+2·5	+1·8	+2·7	+1·7	+1·9	+2·4	+2·1	+1·1	−1·9	+1·6
1910 ..	+0·3	−1·1	−1·0	−0·6	+3·1	+0·7	+0·4	+0·9	+0·4	+1·3	−1·7	+0·6	+0·3
1911 ..	+0·9	+2·1	+2·4	+1·0	+1·8	+6·2	+1·2	+1·3	−1·0	+0·9	−1·9	−0·2	+1·2
1912 ..	+0·5	+0·2	+0·7	−0·7	−0·3	+0·1	+5·1	+7·6	+7·9	+7·3	+7·1	+7·6	+0·1 } +7·1 }
1913 ..	+6·2	+5·7	+4·3	+4·4	+5·6	+7·1	+5·2	+3·5	+3·2	+4·2	+6·0	+6·3	+5·1
1914 ..	+5·4	+5·3	+6·6	+3·7	+3·6	+6·0	+7·0	+5·7	+6·3	+5·0	+4·7	+7·7	+5·6
1915 ..	+3·6	+7·1	+4·7	+5·6	+8·4	+6·1	+7·5	+8·3	+6·9	+6·4	+7·2	+6·9	+6·6
1916 ..	+8·1	+8·1	+7·6	+8·5	+5·4	+5·7	+6·3	+5·7	+7·0	+3·8	+5·5	+5·7	+6·4
1917 ..	+8·7	+8·5	+7·9	+5·8	+6·1	+8·2	+8·1	+9·1	+7·5	+7·2	+6·4	+8·3	+7·6

TABLE 5.—*Mean monthly values (observed and calculated) of the base line of the Horizontal Force Magnetograph Standardised by observations with magnetometer No. 7.*

[Figures in heavy type are calculated values.]

36000 γ +

Years.	Months.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1906 ..	435	457	478	508	544	590	622	653	adj. 681	adj.	474	499
1907 ..	adj.	548	563	581	609	637	661	680	472	adj.	468	480
1908 ..	498	510	524	537	558	572	588	601	620	635	adj.	467
1909 ..	475	489	500	509	523	533	541	548	560	576	586	600
1910 ..						adj. **416**	**425**	**434**	**442**	**451**	**460**	**468**
	603	612	622	633	639	425	425	435	443	455	464	470
1911 ..	**476**	**484**	**492**	**500**	**508**	**516**	**523**	**531**	**538**	**546**	**553**	**560**
	474	476	488	496	509	519	522	530	538	547	552	562
1912 ..	**567**	**574**	**581**	**587**	**593**	**600**	**606**	**613**	**619**	**625**	**631**	**636**
	569	572	578	584	592	601	606	610	615	626	631	636
1913 ..	**642**	**648**	**653**	**658**	**663**	**669**	**674**	**679**	adj.	**482**	**487**	**492**
	642	646	651	659	667	676	672	678		489	491	492
1914 ..	**496**	**500**	**505**	**509**	**514**	**518**	**522**	**526**	**530**	**534**	**538**	**542**
	498	499	503	509	518	522	524	524	526	536	538	541
1915 ..	**546**	**549**	**553**	**557**	**560**	**564**	**567**	**571**	**574**	**577**	**581**	**584**
	544	544	551	558	569	570	569	566	574	579	582	582
1916 ..	**587**	**590**	**593**	**596**	**599**	**602**	**605**	**607**	**610**	**613**	**615**	**617**
	587	587	594	600	602	603	606	602	607	611	613	614
1917 ..	**620**	**622**	**625**	**627**	**629**	**631**	**633**	**635**	**637**	**639**	**641**	**643**
	614	621	625	629	631	634	635	634	635	640	639	640

TABLE 6.—*Mean monthly values (ovserved and calculated) of the base line of the Horizontal Force Magnetograph Standardised by observations with magnetometer No. 3.*

[Figures in heavy type are calculated values.]

36000 γ +

Years.	Months.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1906 ..	432	450	477	504	542	582	616	652	adj. 678	adj.	470	497
1907 ..	adj.	539	560	580	606	629	657	678	471	adj.	464	479
1908 ..	492	506	521	538	552	570	587	603	620	632	adj.	462
1909 ..	474	483	497	507	522	534	539	550	562	575	584	594
1910 ..						adj. **416**	**425**	**434**	**442**	**451**	**460**	**468**
	601	610	621	631	640	422	429	439	443	453	464	466
1911 ..	**476**	**484**	**492**	**500**	**508**	**516**	**523**	**531**	**538**	**546**	**553**	**560**
	471	472	483	494	506	518	525	533	537	547	553	560
1912 ..	**567**	**574**	**581**	**587**	**593**	**600**	**606**	**613**	**619**	**625**	**631**	**636**
	564	568	575	587	594		608	618	625	633	634	644
1913 ..	**642**	**648**	**653**	**658**	**663**	**669**	**674**	**679**	adj.	**482**	**487**	**492**
	649	651	655	666	673	681	681	683		496	488	493
1914 ..	**496**	**500**	**505**	**509**	**514**	**518**	**522**	**526**	**530**	**534**	**538**	**542**
	501	500	510	515	526	530	534	533	538	544	548	547
1915 ..	**546**	**549**	**553**	**557**	**560**	**564**	**567**	**571**	**574**	**577**	**581**	**584**
	549	554	563	563	571	579	580	580	579	586	589	590

The figures in heavy type are the calculated values derived from the formula $Z=a+bt+ct.^2$ where Z is the calculated value of the base line, t is time reckoned from October 1910 in the case of the first adjustment between June 1910 to August 1913 and from November 1913 in the case of the next adjustment. The values of the constants a, b and c are $a=451\gamma$, $b=8\cdot56\gamma$ and $c=-\cdot055\gamma$ for the first adjustment and $a=487\gamma$, $b=4\cdot6\gamma$ and $c=-\cdot029\gamma$ for the next adjustment.

TABLE 7.—*Differences in the values of base lines in tables 5 and 6 showing how far the values of H derived from observations with Auxiliary magnetometer No. 3 differ from those from instrument No. 7.*

Unity = 1γ

Years.	Months.												Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1906 ..	−3	−7	−1	−4	−2	−8	−6	−1	−3	(−4)	−4	−2	−3·7
1907 ..	(−1)	−9	−3	−1	−3	−8	−4	−2	−1	(0)	−4	−1	−3·1
1908 ..	−6	−4	−3	+1	−6	−2	−1	+2	0	−3	(+1)	−5	−2·2
1909 ..	−1	−6	−3	−2	−1	+1	−2	+2	+2	−1	−2	−6	−1·6
1910 ..	−2	−2	−1	−2	+1	−3	+4	+4	0	−2	0	−4	−0·6
1911 ..	−3	−4	−5	−2	−3	−1	+3	+3	−1	0	+1	−2	−1·2
1912 ..	−5	−4	−3	+3	+2	..	+2	+8	+10	+7	+3	+8	−1·4 / +6·3
1913 ..	+7	+5	+4	+7	+6	+5	+9	+5	(+6)	+7	−3	+1	+4·9
1914 ..	+3	+1	+7	+6	+8	+8	+10	+9	+12	+8	+10	+6	+7·3
1915 ..	+5	+10	+12	+5	..	+9	+11	+14	+5	+7	+7	+8	+8·0 / +8·7

TABLE 8.—*Differences between the observed and the calculated values of base lines in table 5.*

Unity = 1γ

Years.	Months.												Year,
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1910 ..						+9	0	+1	+1	+4	+4	+2	
1911 ..	−2	−8	−4	−4	+1	+3	−1	−1	0	+1	−1	+2	−1·2
1912 ..	+2	−2	−3	−3	−1	+1	0	−3	−4	+1	0	0	−1·0
1913 ..	0	−2	−2	+1	+4	+7	−2	−1	adj.	+7	+4	0	+1·5
1914 ..	+2	−1	−2	0	+4	+4	+2	−2	−4	+2	0	−1	+0·3
1915 ..	−2	−5	−2	+1	+9	+6	+2	−5	0	+2	+1	−2	+0·4
1916 ..	0	−3	+1	+4	+3	+1	+1	−5	−3	−2	−2	−3	−0·7
1917 ..	−6	−1	0	+2	+2	+3	+2	−1	−2	+1	−2	−3	−0·4

TABLE 9.—*Differences between the observed and calculated values of base lines in table 6.*

Unity = 1γ

Years.	Months.												Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1910 ..						+6	+4	+5	+1	+2	+4	−2	
1911 ..	−5	−12	−9	−6	−2	+2	+2	+2	−1	+1	0	0	−2·3
1912 ..	−3	−6	−6	0	+1	..	+2	+5	+6	+8	+3	+8	−2·8 / +5·3
1913 ..	+7	+3	+2	+8	+10	+12	+7	+4	adj.	+14	+1	+1	+6·3
1914 ..	+5	0	+5	+6	+12	+12	+12	+7	+8	+10	+10	+5	+7·7
1915 ..	+3	+5	+10	+6	—	+15	+13	+9	+5	+9	+8	+6	+6·0 / +9·3

TABLE 10.—*Base line values of the Declination Magnetograph standardised by observations with magnetometer No. 7.*

Years.	Months.												Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
	′	′	′	′	′	′	′	′	′	′	′	′	′
1906 ..	19·12	19·12	18·92	19·15	19·64	19·65	19·20	19·38	19·60	19·65	adj. 3·28	3·20	
1907 ..	3·04	3·15	3·10	2·95	3·26	3·57	3·47	3·28	3·40	3·32	3·22	3·02	3·23
1908 ..	2·98	3·22	3·12	3·10	3·35	3·85	3·90	3·70	3·62	3·36	3·02	3·06	3·36
1909 ..	3·30	3·55	3·30	3·20	3·60	3·75	3·60	3·45	3·42	3·47	3·17	3·40	3·43
1910 ..	3·52	3·55	3·40	3·50	3·95	3·94	3·62	3·65	3·66	3·77	3·82	adj.	
1911 ..	4·62	4·65	4·62	4·72	4·54	4·45	4·83	5·32	5·14	4·92	4·73	5·06	4·80
1912 ..	5·47	5·79	6·06	5·43	5·04	5·17	5·80	6·56	6·70	6·38	6·75	7·40	6·05
1913 ..	8·52	8·85	8·87	8·10	7·24	7·00	8·18	8·60	adj.	9·40	9·60	10·25	
1914 ..	10·64	11·42	11·62	11·86	10·80	adj.	5·24	5·65	6·40	7·32	7·52	7·38	
1915 ..	8·37	8·95	9·55	9·38	8·85	8·85	8·86	9·67	10·06	adj.	3·20	3·38	
1916 ..	3·98	4·75	5·52	4·38	4·18	4·64	4·58	5·28	5·91	5·89	5·98	adj.	
1917 ..	7·20	7·48	7·21	7·11	6·61	6·56	7·11	7·46	7·34	7·55	8·00	8·17	7·32

TABLE 11.—*Base line values of the Declination Magnetorgraph standardised by observations with magnetometer No. 3.*

	′	′	′	′	′	′	′	′	′	′	adj. ′	′	
1906 ..	18·25	17·92	17·76	18·05	18·40	18·52	18·30	18·42	18·87	18·82	4·10	3·97	
1907 ..	3·70	3·72	4·12	4·02	4·28	4·15	4·17	4·22	4·37	4·06	4·05	3·70	4·05
1908 ..	3·62	3·72	3·62	3·58	4·65	4·85	4·36	4·32	4·37	4·34	4·17	3·90	4·12
1909 ..	3·70	3·52	3·95	3·68	3·87	3·85	3·90	3·95	3·92	3·80	4·07	4·06	3·86
1910 ..	3·67	3·92	3·97	4·10	4·85	4·88	4·92	5·22	5·06	4·95	4·85	adj.	
1911 ..	5·30	5·60	5·75	5·05	4·97	4·84	5·13	5·66	6·08	6·01	6·00	6·29	5·56
1912 ..	6·72	6·98	7·18	6·45	6·09	5·87	6·80	7·10	7·07	7·00	7·45	7·95	6·89
1913 ..	8·76	9·32	8·92	8·62	7·72	7·50	8·42	8·77	adj.	9·48	9·87	10·22	
1914 ..	10·70	11·27	11·65	11·96	11·37	adj.	5·88	6·27	6·70	7·42	7·70	7·40	
1915 ..	8·22	8·90	9·55	8·88	9·17	8·77	8·94	9·65	9·92	adj.	3·12	3·44	
1916 ..	4·10	5·32	6·02	4·68	3·81	4·07	4·59	5·21	5·70	5·81	5·68	adj.	
1917 ..	7·51	7·66	7·87	7·86	[illegible]·21	7·21	7·91	7·98	8·16	8·11	8·61	8·52	7·88

TABLE 12.—*Differences between the base line values (in Tables 10 and 11) derived from observations with magnetometers No. 7 and No. 3.*

	′	′	′	′	′	′	′	′	′	′	′	′	′
1906 ..	−0·87	−1·20	−1·16	−1·10	−1·24	−1·13	−0·90	−0·96	−0·73	−0·83	−0·82	−0·77	−0·98
1907 ..	−0·66	−0·57	−1·02	−1·07	−1·02	−0·58	−0·70	−0·94	−0·97	−0·74	−0·83	−0·68	−0·81
1908 ..	−0·64	−0·50	−0·50	−0·48	−1·30	−1·00	−0·46	−0·62	−0·75	−0·98	−1·15	−0·84	−0·77
1909 ..	−0·40	+0·03	−0·65	−0·48	−0·27	−0·10	−0·30	−0·50	−0·50	−0·33	−0·90	−0·66	−0·42
1910 ..	−0·15	−0·37	−0·57	−0·60	−0·9[illegible]	−0·94	−1·30	−1·57	−1·40	−1·18	−1·03	..	−0·91
1911 ..	−0·68	−0·95	−1·13	−0·33	−0·43	−0·39	−0·30	−0·34	−0·94	−1·09	−1·27	−1·23	−0·76
1912 ..	−1·25	−1·19	−1·12	−1·02	−1·05	−0·70	−1·00	−0·54	−0·37	−0·62	−0·70	−0·55	−0·84
1913 ..	−0·24	−0·47	−0·05	−0·52	−0·48	−0·50	−0·24	−0·17	..	−0·08	−0·27	+0·03	−0·27
1914 ..	−0·06	+0·15	−0·[illegible]3	−0·10	−0·57	..	−0·64	−0·62	−0·30	−0·10	−0·18	−0·02	−0·22
1915 ..	+0·15	+0·05	0·0	+0·50	−0·32	+0·08	−0·08	+0·02	+0·14	..	+0·08	−0·06	+0·05
1916 ..	−0·12	−0·57	−0·50	−0·30	+0·37	+0·57	−0·01	+0·07	+0·21	+0·08	+0·30	..	+0·09
1917 ..	−0·31	−0·18	−0·66	−0·75	−0·60	−0·65	−0·80	−0·52	−0·82	−0·56	−0·61	−0·35	−0·57

Base line values denote easterly declination from January to October 1906 and westerly declination thereafter.

Inclination results in the Colaba-Alibag series upto the year 1908 were derived from observations with the dip circle only. On the installation of the inductor which was eventually to replace the dip circle, it became necessary for the purpose of preserving strict continuity, to determine the true instrumental difference between the two inclinometers. For this purpose, for two years 1909 and 1910 observations with the dip circle were continued as usual on Tuesdays and Fridays and the inductor was observed every Saturday. The indications of the instruments duly corrected for natural change to the mean of the day with the help of the magnetographs, shewed that as the average result for the year 1909 the inductor recorded a higher inclination by 2′·0. Similar result for the year 1910 however made out this difference to be 3′·3. The secular change in dip from 1909 to 1910 as made out by the inductor hence was 8′·6 while the dip circle shewed a change of 7′·3 only. It became apparent thus from the outset that the usual procedure adopted at the Observatory for the derivation of the mean values of inclination for the month and the year as also the values of V obtained with the help of differential corrections from the H and V magnetographs, was by no means free from objections, and a strong suspicion was created that we had here to deal more with errors of the zero creep of the magnetographs rather than the probable errors of observations or instrumental changes of the dip circle or the inductor. To investigate this question, for one year between May 1911 and May 1912 absolute observations of H and D were made every day in the year except on Sundays and holidays, each of the two magnetometers being observed on alternate days. Also observations of I with both the instruments—Schultz's inductor and dip circle—were made every day during the period. This inquiry in connection with the stability of the base line values of the H, D and V magnetographs resulted in the following decisions: (1) that no increase in the number of absolute observations of H and D was necessary as the bi-weekly observations were found quite sufficient in number to give the daily base line values of these two magnetographs reliably correct to the accuracy aimed at but (2) that in the V magnetograph the stability of the zero line was not such as could be depended upon for more than twenty-four hours and hence if the curves were to be standardised with the necessary accuracy for the derivation of the 'daily' base line values, it was obviously imperative to have absolute observations of inclination made every day throughout the year. Such daily observations of I have since been adopted and these have proved useful besides in enabling the instrumental difference between the inductor and the dip circle to be evolved quite accurately. The final differences in the values of inclination and vertical force, applicable to observations with the dip circle prior to the year 1911 and with the inductor thereafter were, as shown by the investigation, 1′·7 and 22γ respectively, the later series by the inductor giving higher values of I and V.

8. Processes of Reduction and Description of the Tables of Results, 1911 to 1915.

(a) *Meteorological tables.*

Pressure of Vapour and additional capacity of the Air.—Having obtained, from the tabulations of the barograms and thermograms, hourly values of barometric pressure, temperature of the air and temperature of evaporation, the pressure of vapour was calculated for each hour with the aid of a table by the formula.

$$f'' = f' - \cdot 01147\,(t - t') \times \frac{P - f'}{30}$$

in which t and t' denote the temperatures of the air and wet bulb thermometers respectively, f'' and f' the pressure of vapour at the temperature of the dew point and at temperature t,' and P the barometric pressure. The values of the pressure of vapour at different temperatures were taken from the following table, the numbers in which have been extracted from Boileau's Collection of Tables :—

Table 1.—*Regnault's values of the Pressure of Vapour at different temperatures.*

Temperature.	Pressure of vapour.	Temperature.	Pressure of vapour.	Temperature.	Pressure of vapour.	Temperature.	Pressure of vapour.	Temperature.	Pressure of vapour.	Temperature.	Pressure of vapour.	Temperature.	Pressure of vapour.	Temperature.	Pressure of vapour.
°	Inch.	°	Inch.	°	Inch.	°	Inch.	°	Inch.	°	Inch.	°	Inch.	°	Inch.
35	·204	43	·278	51	·374	59	·500	67	·662	75	·868	83	1·128	91	1·455
36	·212	44	·288	52	·388	60	·518	68	·685	76	·897	84	1·165	92	1·501
37	·220	45	·299	53	·403	61	·537	69	·709	77	·927	85	1·203	93	1·548
38	·229	46	·311	54	·418	62	·556	70	·733	78	·958	86	1·242	94	1·597
39	·238	47	·323	55	·433	63	·576	71	·758	79	·990	87	1·282	95	1·647
40	·248	48	·335	56	·449	64	·596	72	·784	80	1·023	88	1·324	96	1·698
41	·257	49	·348	57	·466	65	·617	73	·811	81	1·057	89	1·366	97	1·751
42	·267	50	·361	58	·482	66	·639	74	·839	82	1·092	90	1·410	98	1·805

To find the additional capacity of the air the pressure of vapour is deducted from the number in the above table standing opposite to the temperature of the air.

Barometric Pressure.—In table I*a* is shown, for every day in the year for each year, the mean of 24 hourly tabulations of the barograph, corrected to agree with Newman's barometer No. 58; also the mean pressure for each month and each year, and the excess of each monthly mean above the annual mean for the same year. The principal features of the annual variation are indicated at the foot of the table. The maximum amd minimum daily pressures for each month are distinguished by being printed in strong figures.

In Table I*b* are given the diurnal inequalities of the Barometric Pressure for each month of the year and for the whole year. The figures represent the excesses of the mean hourly values of pressure over the respective monthly means. The greatest positive and negative excesses over this mean are printed in strong figures, the difference between the two giving the periodic diurnal range being shown at the foot of the table.

Temperature of the Air, etc.—The plan of the following tables is the same as that of Tables I*a* and I*b*, but the meteorological elements they represent, and the sources from which the numbers are obtained and the mode of their derivation, are as stated below :—

Tables IIa and IIb.—Temperature of the air derived from hourly tabulations of the thermograph dry-bulb.

Tables IIIa and IIIb.—Pressure of vapour derived from hourly tabulations of the thermograph dry-bulb and wet bulb, and of the barograph ; and calculated in the manner described above.

Tables IVa and IVb.—Additional capacity of the air derived from hourly differences between the pressure of vapour corresponding to the temperature of the air and the calculated actual pressure of vapour.

Tables VIa and VIb.—Velocity of the wind without regard to direction derived from hourly tabulations from the register of the Robinson Beckley anemograph reduced by the factor 0·73.

Tables VIc and VId.—Velocities of the north and east components of the wind derived from hourly tabulations from the register of the Robinson-Beckley anemograph.

Tables VIf and VIg.—Velocity of the wind derived from hourly tabulations from the register of the Dines' anemometer.

In Tables II*c* and II*d* are given respectively the maximum and minimum temperatures during the day derived from a pair of maximum and minimum thermometers Nos. 10329 and 37909 by Negretti and Zambra.

Tables V*a* and V*b* are on the same plan as Table I*a* except that the entries made in them, refer to aggregates of rainfall—daily, monthly and yearly instead of mean values: and they are sufficiently explained by their several headings.

The numbers in Table VI*e* refer to wind velocities and are derived from hourly tabulations from the register of the Robinson-Beckley anemograph. The temperatures of the ground given in Table VII*a* are derived from the readings of the several thermometers, made five times a day as regards the 1 inch and 9 inches deep thermometers, and once a day as regards the 20 inches, 60 inches and 132 inches deep thermometers.

In Table VII*b* are shown for each of the five observation hours and for the mean of the day, the temperatures of the ground exposed to the direct rays of the sun, at the depths of 1 and 8 inches below the surface.

In Table VIII are collected data showing the extreme limits between which the oscillations of barometric pressure, temperature of the air, pressure of vapour, and additional capacity of the air were confined in each month and in the whole year, and also the ranges of the respective oscillations. It also indicates the extreme readings of the 1 inch and 8 inches deep thermometers exposed to the solar rays. Tables IX*a* and IX*b* give the daily and monthly means and the annual variation of the relative humidity of the air and of the extent of cloudy sky derived from observations made at 6 10, 14, 16 and 22 hours daily.

The five-day means in Table X are derived from the hourly tabulations of the barograph (reduced to the readings of Newman's barometer No. 58) and thermograph, from the measurements in Newman's rain guage, and from the hourly tabulations from the register of the Robinson-Beckley anemograph.

In other respects these tables require no explanation beyond their titles, the headings of the several columns, and the foot-notes.

(*b*) *Tables of magnetic results.*

Table I*a* gives for each year data and results of absolute observations of vibration and deflection taken with magnetometer No. 7 while Table I*b* gives similar results from supplementary observations with instrument No. 3. Table II*a* gives data and results of observations of absolute Declination taken with magnetometer No. 7 while Table II*b* gives similar results from supplementary observations with instrument No. 3. Table III*a* gives results of observations of Inclination taken with inductor No. 41 by Schulze and Table III*b* gives results of supplementary observations of Inclination taken with dip circle No. 160 up to May 1914 and with inductor No. 108 by Otto Toepfer thereafter.

Tables IV*a* to IV*e* give for each year the base line values of the Horizontal Force magnetograph as derived from absolute observations of H by magnetometers Nos. 7 and 3, details of which are given in Tables I*a* and I*b* for each year. They serve indirectly the useful purpose of indicating the probable errors of the absolute determinations, while furnishing smooth values of the base line adopted for the derivation of the correct daily mean values of H.

Tables V*a* to V*e* similarly give for each year the base line values of the declination magnetograph derived from observations with instrument No. 7 while Table V*f* gives similar values derived from observations with instrument No. 3.

Tables VI*a* to VI*e* give for each year the daily means of Horizontal Force derived from twenty-four hourly ordinates, while Tables VII*a* to VII*e* similarly give the daily means of absolute declination.

Table VIII gives the adopted monthly means of H, D, V, and I determined by the usual method which consists in correcting the monthly mean of the observed absolute values by the difference between the mean ordinate at the time of the absolute determinations and the mean monthly ordinate derived from the twenty-four hourly tabulations, while Table VIII*a* gives similar values derived from supplementary observations with the auxiliary instruments.

Tables IX*a* to IX*e* give for each year the magnetic character of each day as determined from the inspection of the Horizontal Force traces, and the list of quiet days selected from them for the determination of the magnetic diurnal inequalities. Tables IX*f* to IX *j* gives the magnetic character of each day from 10 A.M. to 10 A.M. and also the difference of the daily mean of H from that of the preceding day. The tables are a continuation of table 381 published in the Colaba Magnetic Data, 1846 to 1905, Part II, Chapter X, and are derived exactly on the same lines.

Tables X*a* to X*e* give for each year the non-periodic diurnal ranges of Horizontal Force determined from the hourly tabulations.

Tables XI*a* to XI*e* similarly give the Declination ranges.

Tables XII*a* to XII*f*, XIII*a* to XIII*f*, XIV*a* to XIV*f*, and XV*a* to XV*f* give respectively the diurnal inequalities of Horizontal Force, Declination, Vertical Force and Inclination for each month of the year for the winter and summer half years and for the whole year. Up to the end of 1912 the tabulations of V, D and H magnetograms were respectively made at 10, 9 and 8 minutes *before* the full hour in order that these instants of time may correspond to and lie about the exact full hour of Greenwich mean time. From January 1913 however all the three magnetograms are tabulated at the same instant, *viz.* at 9 minutes to the full hour of Bombay mean time corresponding to the exact Greenwich full hour.

Table XVI gives for the years 1911 to 1915 the variations of temperature in the H. F. Magnetograph enclosure, while Table XVII gives similar variations in the V. F. Magnetograph enclosure. The very minute variations of temperature in these tables serve to show that the diurnal inequalities given in the preceding tables may be taken practically as compensated for temperature especially as the temperature co-efficients of the two instruments are small (*vide* reference above).

Table XVIII gives the magnitudes of the aperiodic corrections applicable to the all-day diurnal inequalities of Horizontal Force as determined by different processes. Tables XIX and XX give similar figures for the Declination and the Vertical Force inequalities respectively.

In other respects all the above tables require no explanation beyond their titles, the headings of the several columns and the foot-notes.

(*c*) *Tables of seismic disturbances.*

Table I for each year gives the list of seismic disturbances recorded by the Milne's seismograph. It is on the same plan as similar tables published in the previous volumes of the observatory and calls for no remarks.

In tables II*a* and II*b* are similarly given details of seismic disturbances recorded by the Colaba (E.-W. and N.-S.) seismographs Nos. 1 and 2 respectively.

Table III gives the list of disturbances recorded by the Omori-Ewing seismograph while in table IV is given a similar list of movements picked up by the float record of the vertical movement seismograph.

9. NOTES ON INSTRUMENTAL CHANGES AND ON ALL IRREGULARITIES OR DEPARTURES FROM THE ROUTINE OF OBSERVATION OR REDUCTION DURING THE PERIOD 1911 TO 1915.

Robinson-Beckley Anemograph.—The external parts were painted on 14th June 1911, 5th January 1912, 7th May 1913, 21st May 1914 and 12th June 1915. The clock was taken to pieces for cleaning on 31st March 1911 and on 24th September 1914. The aggregate of all the interruptions of the instrument in the years 1911 to 1915 was $25^h\ 38^m$. In all such cases the interruptions were of short duration and were substituted by values obtained from Dines's record by the constant factor determined for the two instruments. No complete day's record has been omitted in the formation of the monthly abstracts.

Dines's Anemometer.—The sensibility of the instrument is determined by a weight of 46 grains which produces a displacement of the pen, measuring about two miles on the chart. Whenever this is appreciably affected, the instrument is opened up and cleaned, and the accumulated scum on the float removed. The instrument was so cleaned and adjusted on the 6th January and 27th August 1911, 7th October and 6th November 1913 and 6th July 1915. The aggregate of all the interruptions of the instrument for the five years 1911 to 1915 was respectively, $1^d\ 7^h\ 58^m$, $6^d\ 11^h\ 13^m$, $2^d\ 23^h\ 22^m$, $4^d\ 14^h\ 51^m$ and $2^d\ 8^h\ 19^m$. The interruptions were principally due to adjustment of the instrument, to casual failure of the pen to record the fluctuations, to re-adjustment of the inclination of pen, to the stoppage or cleaning of the clock and to the derangement of the driving apparatus. On a few occasions when the wind velocity was very weak and fell near to zero, the record appeared to be faulty and had to be interpolated. These are included in the above aggregate and respectively amount to $0^d\ 2^h\ 16^m$, $2^d\ 3^h\ 27^m$, $0^d\ 22^h\ 49^m$, $0^d\ 0^h\ 0^m$ and $1^d\ 15^h\ 52^m$, for the five years. Two complete day's record has been omitted in the formation of monthly abstracts, *viz.*, the 4th and the 5th April 1914 when modifications were made in the driving arrangement. Other short interruptions were made good by interpolation from Robinson-Beckley's record by the constant determined for the two instruments. Short interruptions caused by the regular change of paper every day for both anemometers, if not unusually prolonged, are not included in the above aggregate.

Method of interpolation in Tabulations.—When for any reason the traces furnished by the photographic self-registering instruments are interrupted, and the interruption includes the moments when one or more hourly tabulations should be made, these last are either substituted by the corresponding eye-observations, if the hours should happen to be any of the five regular observation hours, or if special eye-observations, were taken for the purpose, or else if no eye-observations are available, they are interpolated. Interpolation is resorted to rarely and only in case of accidents, otherwise, eye-observations are always made, in order to keep the record unbroken. If the interruption lasts for less time than one hour, the interpolation is made on the assumption that the rate of change of the phenomenon from its value at the beginning to that at the end of the interruption was uniform, provided that the parts of the curve immediately preceding and immediately following the gap were, in appearance, continuations of the straight line connecting the extremities of the gap. If the last condition is not satisfied, or if the gap, taking account of points inserted by means of eye-observations, is of greater length than one hour, the interpolation is made between the next preceding and the next following hourly entries, first, by allowing for the known *normal* rate of change of the phenomenon between those hours in the same month, and then by assuming that any additional change, shown by the difference between the values of the phenomenon at the two extreme hours, has grown at a uniform rate. Such interpolated values however are entered in the abstract sheets with enclosing square brackets while inserted eye-observations are shown between parentheses.

Barograph.—No tabulations were obtained for the following hours for the several reasons stated, but eye-observations were available and were adopted for the hours marked within parentheses, in 15 cases out of 19, interpolation being resorted to in the remaining 4 cases :—

(1) Clock taken to pieces for cleaning on 1911 May 4^d (10^h to 13^h).

(2) Stoppage of the clock on 1911 October 9^d (19^h and 20^h).

(3) Stoppage of the clock on 1912 January 21^d (11^h).

(4) Examination of the bi-hourly break arrangement on 1913 March 29^d (10^h).

(5) Defective action of the bi-hourly fan on 1913 April 1^d (22^h).

(6) Defective action of the bi-hourly fan on 1913 April $3^d\ 0^h$.

(7) Examination of the bi-hourly break arrangement on 1913 April $18^d\ 11^h$.

(8) Wrong setting of the cylinder on 1913 May $18^d\ 12^h$, 13^h and (14^h).

(9) Clock taken to pieces for cleaning on 1914 November 7^d (10^d to14^h).

Occasional, though rare, failure of bi-hourly stops to act has caused no loss of record.

The aggregate of all the interruptions of the barograph in the years 1911 to 1915 was $27^h\ 19^m$, and the number of hourly tabulations lost was 19, and of these 15 were substituted by eye-observations, leaving 4 more to be interpolated. Short interruptions caused by the regular change of photographic paper and by change of lamps, if not unusually prolonged, are not included in the above aggregate, nor in the aggregates of interruptions of the thermographs that follow further on.

Thermograph Dry-Bulb.—No tabulations were obtained for the following hours for the several reasons stated, but eye-observations were available and were utilised for the hours marked within parentheses, in all cases, except in 5, when interpolation had to be resorted to :—

(1) Stoppage of the driving clock on 1911 April $3^d\ 11^h$.

(2) Examination of the bi-hourly break arrangement on 1911 April 4^d (11^h).

(3) Clock taken to pieces for cleaning on 1911 April 26^d (15^h to 19^h).

(4) Stoppage of clock and its examination on 1911 April 28^d (9^h to 11^h).

(5) Adjustment of the bi-hourly break arrangement on 1911 April 30^d (11^h).

(6) Examination of the bi-hourly break arrangement on 1911 May 6^d (11^h).

(7) Examination of the bi-hourly break arrangement on 1911 May 8^d (18^h).

(8) Stoppage of clock on 1912 March $21^d\ 5^h$.

(9) Stoppage of clock on 1912 April $17^d\ 19^h$ and 21^h.

(10) Stoppage of clock on 1914 November 5^d (16^h).

(11) Clock taken to pieces for cleaning on 1914 November 6^d (12^h to 15^h).

(12) Stoppage of clock on 1915 April $3^d\ 18^h$.

Occasional, though rare, failure of the bi-hourly stops to act has caused no appreciably large loss of record.

The aggregate of all the interruptions of the thermograph dry-bulb in the years 1911 to 1915 was $28^h\ 22^m$, and the number of hourly tabulations lost was 22, and of these 17 were substituted by eye-observations, leaving 5 to be interpolated.

Thermograph Wet-Bulb.—No tabulations were obtained for the following hours for the several reasons stated, but eye-observations were available and were adopted for the hours marked within parentheses, in all cases except in 5, when interpolation had to be resorted to :—

(1) Loss of curve owing to low temperature on 1911 February 1^d (5^h to 13^h and 22^h and 23^h).

(2) Loss of curve owing to low temperature on 1911 February 2^d (0^h to 9^h).

(3) Stoppage of the driving clock on 1911 April $3^d\ 11^h$.

(4) Examination of the bi-hourly break arrangement on 1911 April 4^d (11^h).

(5) Clock taken to pieces for cleaning on 1911 April 26^d (15^h to 19^h).

(6) Stoppage of clock and its examination on 1911 April 28^d (9^h to 11^h).

(7) Adjustment of the bi-hourly break arrangement on 1911 April 30^d (11^h).

(8) Examination of the bi-hourly break arrangement on 1911 May 6^d (11^h).

(9) Examination of the bi-hourly break arrangement on 1911 May 8^d (18^h).

(10) Stoppage of clock on 1912 March $21^d\ 5^h$.

(11) Stoppage of clock on 1912 April $17^d\ 19^h$ and 21^h

(12) Stoppage of clock on 1914 November 5^d (16^h).

(13) Clock taken to pieces for cleaning on 1914 November 6^d (12^h to 15^h).

(14) Stoppage of clock on 1915 April $3^d\ 18^h$.

Occasional, through rare, failure of the bi-hourly stops to act has caused no appreciably large loss of record.

The aggregate of all the interruptions of the thermograph wet-bulb in the years 1911 to 1915 was $2^d\ 13^h\ 26^m$, due to the causes mentioned above and to the short intervals of time occupied in cleaning and renewing the muslin covering of the bulb and the bundle of threads connecting it with the supply of water. The total number of hourly tabulations lost was 41 and of these 36 were substituted by eye-observations, leaving 5 to be interpolated.

Self-registering Rain-Gauge.—No tabulations were obtained for the following hours for the several reasons stated :—

(1) Faulty record due to leakage from 1912 November $22^d\ 0^h$ to 10^h.

(2) Faulty working of the syphon in the receiver from 1913 June $7^d\ 0^h$ to 6^h.

In all cases eye-observations of Newman's rain-guage were made use of to fill up the gaps and to obtain the daily total rainfall.

Horizontal Force magnetograph.—The following statement shows the principal cases in which irregularities of procedure have been rendered necessary in the hourly tabulations by extraneous disturbing influences or by imperfections in the working or management of the instruments :—

(1) Loss of curve due to the obstruction of light by the falling down of the shutter from 1911 April 9^d 19^h 12^m to 10^d 9^h 10^m. The whole day is rejected for taking the monthly averages.

(2) Faulty adjustment of the lamp from 1911 May 17^d 11^h 30^m to 12^h 25^m. Tabulation for 12^h interpolated.

(3) Stoppage of the clock from 1911 December 19^d 2^h 18^m to 3^h 11^m. Tabulation for 3^h interpolated.

(4) Loss of curve due to omission to raise the reading mirror from 1912 January 29^d 13^h 52^m to 15^h 52^m. Tabulation for 15^h interpolated.

(5) Irregular motion of the cylinder from 1912 August 1^d 9^h 25^m to 22^h 28^m. The whole day is rejected for taking the monthly averages.

(6) Stoppage of the clock from 1913 July 5^d 23^h 15^m to 6^d 4^h 42^m. Tabulations from 0^h to 4^h interpolated.

(7) Loss of curve due to repairs to the cylinder fastener from 1914 January 15^d 9^h 7^m to 10^h 17^m. Tabulation for 10^h substituted by eye-observation.

(8) Lamp extinguished from 1915 July 17^d 20^h 10^m to 21^h 25^m. Tabulation for 21^h interpolated.

Occasional, though rare, failure of the hourly stops to act has caused no appreciably large loss of record.

The aggregate of all the interruptions of the Horizontal Force Magnetograph in the years 1911 to 1915 was 15^h 46^m, 15^h 31^m, 7^h 16^h, 2^h 7^m and 1^h 15^m respectively. The total number of hourly tabulations lost during these years was 37 out of which only 1 was substituted by eye-observation and 9 were interpolated. Two whole days were rejected for taking the monthly averages as the loss of curve exceeded half a day on those days.

Shift in the base line value of the Horizontal Force Magnetograph occurred on the 15th September 1913 when the instrument was adjusted.

Declination Magnetograph.—The following statement shows the principal cases in which irregularities of procedure have been rendered necessary in the hourly tabulations by extraneous disturbing influences or by imperfections in the working or the management of the instruments :—

(1) Stoppage of the clock from 1911 December 19^d 2^h 18^m to 3^h 11^m. Tabulation for 3^h interpolated.

(2) Loss of zero line on 1912 April 12^d 9^h 38^m to 13^d 6^h 5^m. Tabulations for 10^h to 6^h made by using the zero line of the second day on the sheet after applying a correction derived from a comparison with the five hourly readings of the day.

(3) Loss of curve from 1912 April 13^d 6^h 5^m to 9^h 30^m. Tabulations from 7^h to 9^h interpolated.

(4) Loss of curve from 1912 April 14^d 9^h 13^m to 15^d 9^h 11^m. The whole day is rejected.

(5) Loss of curve due to the falling down of the lid in the box from 1912 December 21^d 13^h 53^m to 15^h 55^m. Tabulation for 15^h interpolated and that for 16^h substituted by an eye-observation.

(6) Loss of curve due to omission to raise the reading mirror properly from 1913 March 11^d 9^h 55^m to 13^h 21^m. Tabulations from 11^h to 13^h interpolated.

(7) Stoppage of the clock from 1913 July 5^d 23^h 15^m to 6^d 4^h 42^m. Tabulations from 0^h to 4^h interpolated.

(8) A shift in the zero line occurred at 1913 September 15^d 9^h 51^m and at 15^h 51^m. Corrections applied to tabulations from 10^h to 15^h to make the whole day comparable.

(9) Loss of curve due to defect in the lamp from 1914 February 25^d 8^h 11^m to 9^h 11^m. Tabulation for 9^h interpolated.

(10) Shift in the zero line due to adjustment of the zero mirror on 1914 June 13^d 11^h 31^m to 48^m. Tabulations for 10^h and 11^h corrected for the shift to make the whole day comparable.

(11) Loss of curve due to the falling down of the shutter from 1915 June 30^d 13^h 52^m to 21^h 58^m. Tabulations for 16^h and 22^h substituted by eye-observations and for 15^h and 17^h to 21^h interpolated.

Occasional, though rare, failure of the hourly stops to act has caused no appreciably large loss of record.

The aggregate of all the interruptions of the Declination Magnetograph record in the years 1911 to 1915, was 1^h 14^m, 1^d 20^h 32^m, 9^h 47^m, 1^h 52^m and 8^h 49^m respectively. The total number of hourly tabulations lost during these years was 47 out of which 3 were substituted by eye readings and 20 were interpolated. One whole day was rejected as the curve was completely lost on that day.

Shift in the base line value of the Declination Magnetograph occurred on the 15th and 27th September 1913 and the zero mirror was adjusted on the 13th June 1914 and on the 25th October 1915.

Vertical Force Magnetograph.—The following statement shows the principal cases in which irregularities of procedure have been rendered necessary in the hourly tabulations by extraneous disturbing influences or by imperfections in the working or the management of the instruments :—

(1) Measurements of parts of the Instrument from 1911 April 3^d 17^h 3^m to 18^h 4^m. Tabulations for 18^h to 20^h interpolated as the record appeared to be disturbed.

(2) Stoppage of clock from 1911 May 17^d 10^h 17^m to 11^h 30^m. Tabulation for 11^h interpolated.

(3) Curve disturbed by experiments for finding the temperature co-efficient of the instrument which commenced at 1911 May 21^d 8^h 9^m. Tabulation for 9^h to 16^h interpolated.

(4) Examination of the instrument from 1911 August 9^d 15^h 55^m to 16^h 15^m. As the record thereafter was abnormally disturbed for a considerable interval the whole day is rejected for taking the monthly averages.

(5) Clock taken to pieces for cleaning on 1912 March 25^d 14^h 57^m to 18^h 47^m. Tabulations for 16^h to 18^h substituted by eye-observations.

(6) Loss of curve due to the breakage of the cylinder fastener from 1912 April 14^d 9^h 28^m to 10^h 16^m. Tabulation for 10^h substituted by an eye-observation.

(7) Adjustment of the instrument on 1912 April 28^d 8^h 15^m to 41^m. Tabulation for 9^h calculated as the record seemed to be disturbed.

(8) Adjustment of the instrument on 1912 May 8^d 10^h 4^m to 10^h. As the record after the adjustment was abnormally disturbed for a considerable interval the whole day is rejected for the monthly averages.

(9) Loss of curve due to omission to raise the reading mirror from 1912 May 11^d 13^h 50^m to 15^h 49^m. Tabulation for 15^h interpolated.

(10) Examination of the instrument on 1912 May 13^d 10^h 19^m to 10^h 40^m. As the record after this was abnormally disturbed for a considerable interval the whole day is rejected for taking the monthly averages.

(11) Loss of curve due to weak light from 1912 May 14^d 12^h 35^m to 14^h 57^m. Tabulations for 13^h to 15^h interpolated.

(12) Loss of curve due to trials to improve the quick run record which was not obtained from 1912 May 15^d 14^h 14^m to 15^h 13^m. Tabulation for 15^h interpolated.

(13) Loss of curve due to trials to improve the quick run record which was not obtained from 1912 May 16^d 8^h 24^m to 9^h 31^m. Tabulation for 9^h interpolated.

(14) Loss of curve due to defect in the light from 1912 May 19^d 3^h 57^m to 5^h 13^m. Tabulation for 5^h interpolated.

(15) Loss of curve due to adjustment of the lamp from 1912 May 19^d 6^h 35^m to 7^h 8^m. Tabulation for 7^h interpolated.

(16) Levelling and adjustment of the instrument from 1912 May 23^d 17^h 58^m to 18^h 21^m. Tabulations for 19^h to 9^h corrected for a dislocation of ·210 cm. which appears to have occurred during the period.

(17) Loss of curve due to trials to improve the curve specks from 1912 June 1^d 9^h 12^m to 10^h 42^h. Tabulation for 10^h substituted by an eye-reading.

(18) Loss of curve due to omission to raise the reading mirror from 1912 July 21^d 5^h 50^m to 9^h 8^m. Tabulations for 7^h to 9^h interpolated.

(19) Loss of curve due to omission to raise the reading mirror from 1912 September 5^d 13^h 50^m to 15^h 5^m. Tabulation for 15^h interpolated.

(20) Stoppage of clock from 1912 September 12^d 12^h 23^m to 13^h 49^m. Tabulation for 13^h interpolated.

(21) Loss of curve due to stoppage of the cylinder from 1912 September 15^d 9^h 26^m to 10^h 14^m. Tabulation for 10^h substituted by an eye-observation.

(22) Stoppage of the clock from 1912 September 28^d 1^h 9^m to 3^h 18^m. Tabulations for 2^h and 3^h interpolated.

(23) Clock taken to pieces for cleaning from 1912 September 29^d 13^h 58^m to 17^h 21^m. Tabulations for 15^h to 17^h substituted by eye-observations.

(24) Loss of curve due to defect in the flame from 1912 December 28^d 0^h 50^m to 4^h 8^m. Tabulations for 2^h to 4^h interpolated.

(25) Clock taken to pieces for cleaning on 1913 April 22^d 14^h 11^m to 17^h 19^h. Tabulation for 16^h substituted by eye-observation and tabulations for 15^h and 17^h interpolated.

(26) Loss of curve due to breakage of the chimney from 1913 May 13^d 10^h 24^m to 11^h 31^m. Tabulation for 11^h interpolated.

(27) Loss of curve from 1913 November 26^d 9^h 26^m to 28^d 9^h 21^m as the bromide paper was wrongly fixed on the cylinder with the sensitive side inwards. These two days are therefore omitted for taking the monthly averages.

(28) Adjustment of the V. F. Magnetograph from 1914 June 13^d 11^h 16^m to 11^h 29^m and from 12^h 15^m to 12^h 28^m. As the record after this time appeared to be abnormally disturbed for a considerable interval the whole day is rejected for taking the monthly averages.

(29) Loss of curve due to trials to improve the curve specks from 1914 June 21^d 9^h 14^m to 10^h 24^m. Tabulation for 10^h substituted by an eye-observation.

(30) Loss of curve due to trials to improve the curve specks from June 1914 30^d 10^h 7^m to 11^h 26^m. Tabulation for 11^h substituted by an eye-observation.

(31) Curve dislocated or disturbed probably by an insect in the enclosure. Tabulations for 1914 October 1^d 2^h and 8^h which appeared to be so disturbed were interpolated.

(32) Adjustment of the V. F. magnet to improve the curve specks between 1915 December 7^d 9^h 54^m to 10^h 1^m. Tabulation for 10^h corrected by ·020 cm. which was calculated as the amount of the dislocation.

Occasional, though rare, failure of the hourly stops to act has caused no appreciably large loss of record.

The aggregate of all the interruptions of the Vertical Force Magnetograph in the years 1911 to 1915 was 3^h 46^m, 37^h 42^m, 56^h 14^m, 6^h 22^m and 0^h 7^m respectively during which the curve was completely lost. The total number of hourly tabulations lost on this account was 82 out of which only 12 were substituted by eye-readings, 22 were interpolated and two whole days were rejected. During the period 13 hourly tabulations had also to be interpolated as the record was artificially disturbed and appeared to be faulty, and 4 more days had to be completely rejected as the record on these days was abnormally disturbed for a considerable interval immediately following an examination or adjustment of the instrument.

The following is a complete list of dislocations which have been noted to have occurred on the Vertical Force Magnetograph curves. Whenever a dislocation has occurred in the middle of the day as reckoned from 10^h to 9^h of the following day the tabulations of the hours immediately preceding or following the time of the dislocations have been corrected by the amounts determined from the measurements on the curves to make the whole day comparable throughout. This secures an unvitiated diurnal inequality. Such corrections have also been applied whenever the tabulation ordinates had to be made comparable as in the case of the determination of absolute values and the derivation of quiet-

day diurnal inequalities. The times of occurrence of these dislocations together with the amounts (in cms.) by which the curves have been shifted are as detailed below :—

1911	February	..	$24^d\ 13^h\ 50^m$ (·070)
	June	..	$2^d\ 22^h\ 27^m$ (·015)
	September	..	$1^d\ 9^h\ 51^m$ (·052)
	December	..	$30^d\ 9^h\ 50^m$ (·010)
1912	April	..	$17^d\ 5^h\ 51^m$ (·050)
	April	..	$23^d\ 5^h\ 50^m$ (·010)
	May	..	$8^d\ 15^h\ 49^m$ (·013)
	May	..	$8^d\ 21^h\ 50^m$ (·030)
	May	..	$23^d\ 17^h\ 58^m$ to $18^h\ 21^m$ (·210)
1913	June	..	$7^d\ 17^h\ 33^m$ (·070)
1914	June	..	$27^d\ 21^h\ 36^m$ (·010)
1915	December	..	$7^d\ 9^h\ 54^m$ to $10^h\ 1^m$ (·020)

N. A. F. MOOS,

Director, Government Observatories,

Bombay and Alibag.

Bombay Observatory, 23rd December 1918.

TABLES OF RESULTS

DERIVED FROM

THE CONTINUOUS REGISTRATIONS OF AUTOMATIC METEOROLOGICAL INSTRUMENTS

AND FROM

ABSOLUTE METEOROLOGICAL OBSERVATIONS.

1911—1915.

CORRIGENDA.

Bombay Magnetic, Meteorological and Seismographic Observations, 1911 to 1915.

INTRODUCTION.

Page	V	line	7	from	below	*for* exception	*read*	except on
,,	XIV	,,	17	,,	,, ,,	building	,,	building
,,	XXII	Table	3	year	1917	January *for* 05·77	,,	905.77
,,	XXVIII	Para.	6	line	3	*for* gives *read* give		
,,	XXXI	,,	4	,,	2	*for* 7*h* 16 *h read* 7*h* 16 *m*		

Meteorological and Seismographic tables.

Page	1	Table	I*a*					
				August 3*d*	*for*	.66	*read*	.766
,,	2	,,	II*b*	July 6*h* 2*m*	,,	—1.5		To be in thick type.
,,	,,	,,	,,	Year 10*h* 2*m*	,,	—1.3	,,	+1.3
,,	4	,,	III*a*	April 25*d*	,,	.840	,,	.849
,,	9	,,	VI*d*	June 10*h* 11*h*	,,	0·0	,,	0.1
,,	11	,,	VI*g*	December 17*h* 18*h*	,,	+1.6		To be in thin type.
,,	23	,,	VI*c*	December 15*d*	,,	4.7 *N*	,,	4.1 *N*
,,	29	,,	IX*a*	August 30*d*	,,	.885	,,	.855
,,	35	,,	IV*b*	March 6*h* 2*m*	,,	—109	,,	—104
,,	51	,,	V*a*	August 13*d*	,,	1.76	,,	1.96
,,	53	,,	VI*c*	May 25*d*	,,	0.75	,,	0.7*N*
,,	54	,,	VI*d*	October 18*h* 19*h*	,,	4.1	,,	To be in thin type.
,,	56	,,	VI*f*	August 26*d*	,,	4.7	,,	7.5
,,	,,	,,	,,	September 26*d*	,,	7.5	,,	4.7
,,	59	,,	IX*b*	November 23*d*	,,	2.8	,,	To be in thin type.
,,	,,	,,	,,	,, 24	,,	1.8	,,	,,
,,	,,	,,	,,	,, 25	,,	1.4	,,	,,
,,	,,	,,	,,	,, 26	,,	1.0	,,	,,
,,	,,	,,	,,	,, 27	,,	1.4	,,	,,
,,	,,	,,	,,	,, 29	,,	2.0	,,	,,
,,	,,	,,	,,	,, 30	,,	2.4	,,	,,
,,	71	,,	VI*g*	March 12*h* 13*h*	,,	+1.9	,,	+0.9
,,	75	,,	X	Number 72 of 5 day period	,,	.299	,,	.229
,,	75	,,	X	Number 58 Rainfall of 5 day period	*for*	0.98	*read*	0.28.
,,	87	,,	1	The figures and remarks in the vertical columns from column No. 3 onward upto the end have been shifted. The first horizontal line is all right. The second line ending with the remark "Movements very small" should be read against the date 1912 January 26th (observatory No.2) and the following lines shifted down accordingly.				
,,	103	Column 6		May 16*d*	*for*	4.0	*read*	74.0

MAGNETIC TABLES.

Page	7	Table	I*b*							
				July 13*d*	Column	8	*for*	89.40	*read*	89.10
,,	,,	,,	,,	,, ,,	,,	13	,,	,,	,,	,,
,,	,,	,,	,,	September 2*d*	,,	5	,,	,,	,,	28.0
,,	8	,,	,,	December 26*d*	,,	8	,,	87.77	,,	86.77
,,	,,	,,	,,	,, ,,	,,	13	,,	,,	,,	,,
,,	10	,,	II*a*	October 18*d*	,,	5	,,	85.24·0	,,	85.24.30
,,	,,	,,	,,	November 10*d*	,,	11	,,	0.52.0	,,	0.52.55
,,	11	,,	II*b*	January 26*d*	,,	6	,,	53.22.25	,,	53.22.22
,,	,,	,,	,,	April 20*d*	,,	7	,,	,,	,,	10*W*
,,	,,	,,	,,	,, ,,	,,	8.	,,	,,	,,	0.71
,,	12	,,	,,	September 5*d*	,,	11	,,	0.51.9	,,	0.51.29
,,	13	,,	III*a*	March 24*d*	,,	East.	,,	23.46.62	,,	23.46.42
,,	,,	,,	,,	May 19*d*	,,	Mean Inclination.	,,	23.6.19	,,	23.46.19
,,	14	,,	,,	September 18*d*	,,	At Commencement.	,,	11.6	,,	11.16
,,	15	,,	,,	December 14*d*	,,	Mean Inclination.	,,	23.52.7	,,	23.52.17
,,	21	,,	I*a*	July 24*d*	,,	3	,,	2.70.6	,,	2.70·76
,,	,,	,,	,,	April 19*d*	,,	10	,,	10.48.2	,,	10.48.42
,,	22	,,	,,	December 18*d*	,,	13	,,	85.0	,,	85.40
,,	24	,,	I*b*	June 24*d*	,,	15	,,	9 1.09	,,	911.09
,,	,,	,,	,,	April 4*d*	,,	12	,,		,,	6.927
,,	25	,,	,,	July 9*d*	,,	12	,,	5.86	,,	5.866
,,	27	,,	II*a*	December 5*d*	,,	6	,,	222.25.5	,,	222.24.5
,,	28	,,	II*b*	March 28	,,	7	,,	·0	,,	20*W*
,,	,,	,,	,,	,, ,,	,,	8	,,	..	,,	0·64
,,	29	,,	II*b*	November 7*d*	,,	7	,,	·0·	,,	7*W*
,,	,,	,,	,,	,, ,,	,,	8	,,	...	,,	0.61
,,	30	,,	III*a*	February 7*d*	,,	3	,,	2*h* 5*m*	,,	12*h* 5*m*
,,	31	,,	,,	April 3*d*	,,	,,	,,	2*h* 6*m*	,,	12*h* 6*m*
,,	,,	,,	,,	,, 13*d*	,,	2	,,	3*h* 58*m*	,,	13*h* 58*m*
,,	,,	,,	,,	,, 15*d*	,,	East.	,,	23.54.2	,,	23.54.42
,,	,,	,,	,,	,, 16*d*	,,	Mean Inclination.	,,	23.55.7	,,	23.55.78
,,	32	,,	,,	August 1*d*	,,	,,	,,	23.56.50	,,	23.55.50
,,	33	,,	,,	December 11*d*	,,	At Conclusion.	,,	2*h* 2*m*	,,	12*h* 2*m*
,,	,,	,,	,,	,, 14*d*	,,	East B.	,,	23.0.47	,,	24.0.47
,,	34	,,	III*b*	January 11*d*	,,	West.	,,	23.49.6	,,	23.59.5
,,	,,	,,	,,	,, ,,	,,	Mean Dip.	,,	23.59.5	,,	23.50.9
,,	37	,,	I*a*	January 22*d*	,,	5	,,	25.0	,,	26.0
,,	,,	,,	,,	February 26*d*	,,	10	,,	1.50.36	,,	10.50·36

Page	38	Table	I*a*	April 30*d*	Column	9	*for*	26.33.29	*read*	26.33.27
,,	42	,,	I*b*	November 24*d*	,,	19	,,	.368.2	,,	0.36882
,,	44	,,	II*b*	March 13*d*	,,	7	,,	0	,,	10E
,,	,,	,,	,,	,, ,,	,,	8	,,	,,	,,	0.64
,,	45	,,	III*a*	February 4*d*	,,	At Commencement.	,,	1*h* 45*m*	,,	11*h* 45*m*
,,	46	,,	,,	April 12*d*	,,	Date.	,,	2	,,	12
,,	47	,,	,,	August 7*d*	,,	Mean Inclination.	,,	24.3.7	,,	24.3.67
,,	48	,,	,,	October 4*d*	,,	East.	,,	4 4.45	,,	24.4.45
,,	56	,,	I*b*	In foot Note			,,	Table VI	,,	Table VIII*a*
,,	58	,,	II*b*		,,	1	,,	After January	,,	February.
,,	,,	,,	,,		,,	,,	,,	,, February	,,	March.
,,	61	,,	III*a*	July 25*d*	,,	Date.	,,	2	,,	25
,,	66	,,	I*a*	March 24*d*	,,	3	,,	2.7100	,,	2.7101
,,	67	,,	,,	April 7*d*.	,,	10	,,	10.41	,,	10.481
,,	68	,,	,,	December 22*d*	,,	8	,,	84.61	,,	84.60
,,	,,	,,	,,	,, ,,	,,	13	,,	,,	,,	,,
,,	70	,,	I*b*	June 7*d*	,,	18	,,	+.0001	,,	+.00010
,,	,,	,,	,,	July 19*d*	,,	7	,,	7.566	,,	7.565
,,	71	,,	I*b*	October 4*d*	,,	6	,,	+80	,,	+0.8
,,	73	,,	II*b*	July	,,	13	,,	0.39.47	,,	0.37.48
,,	74	,,	III*a*	April 12*d*	,,	Mean Inclination.	,,	24.1.65	,,	24.15.65
,,	75	,,	,,	July 10*d*	,,	Date.	,,	After 9th	,,	10th.
,,	,,	,,	,,	August 13*d*	,,	At Conclusion.	,,	11*h* 3*m*	,,	11*h* 30*m*
,,	,,	,,	,,	,, 25*d*	,,	Date.	,,	After 23rd	,,	25th.
,,	78	,,	III*b*	August 3*d*	,,	At Conclusion.	,,	11*h* 57*m*	,,	11*h* 51*m*
,,	121	,,	XI*b*	March 7*d*	,,	,,	,,	1	,,	2.1
,,	127	,,	XIII*c*	June 7*h* 51*m*	,,	,,	,,	216	,,	To be in thin type.
,,	,,	,,	,,	August 12*h* 51*m*	,,	,,	,,	213		Do. do.
,,	,,	,,	,,	September 11*h*51*m*	,,	,,	,,	235		Do. do.
,,	130	,,	XIV*c*	April 10*h*51*m*	,,	,,	,,	185		To be in thick type.
,,	132	,,	XV*a*	May 5*h* 51*m*	,,	,,	,,	92	,,	Do. do.
,,	,,	,,	,,	,, 6*h* 51*m*	,,	,,	,,	67	,,	Do. do.
,,	133	,,	XV*d*	December 8*h* 51*m*	,,	,,	,,	−8	,,	+8
,,	135	,,	XVI	Heading	,,	,,	,,	Mean temperature.	,,	Mean monthly temperature.
,,	136	,,	XVII	,,	,,	,,	,,	,,	,,	,,

APPENDIX.

Page	7	Table	IV*e*	March 17*h* 51*m*	*for*	330	*read*	320
,,	9	,,	V*c*	January 11*h* 51*m*	,,	202	,,	201
,,	,,	,,	,,	,, 13*h* 15*m*	,,	52	,,	51
,,	10	,,	V*c*	May 14*h* 51*m*	,,	+99	,,	+100
,,	,,	,,	,,	July 17*h* 51*m*	,,	115	,,	155
,,	11	,,	VI*a*	June 22*h* 51*m*	,,	19	,,	29
,,	,,	,,	,,	December 14*h* 51*m*	,,	+39	,,	+41
,,	12	,,	VI*c*	April 9*h* 51*m*	,,	+146	,,	+46
,,	,,	,,	,,	Year	,,	+5	,,	−3
,,	,,	,,	,,	September 17*h* 51*m*	,,	+41	,,	+21
,,	,,	,,	,,	Year ,,	,,	+19	,,	+18
,,	13	,,	VI*e*	June 17*h* 51*m*	,,	−10	,,	+10
,,	,,	,,	,,	Year ,,		+9	,,	+10
,,	,,	,,	,,	August 18*h* 51*m*		+29	,,	−29
,,	,,	,,	VI*f*	1911 April to September 23*h*	,,	+4	,,	+6
,,	,,	,,	,,	1913 April to September 10*h*	,,	+11	,,	−5
,,	,,	,,	,,	1913 Year ,,	,,	+5	,,	−3
,,	,,	,,	,,	1913 April to September 18*h*	,,	+22	,,	+18
,,	,,	,,	,,	1913 Year ,,	,,	+19	,,	+18
,,	,,	,,	,,	1915 April to September 18*h*	,,	+21	,,	+24
,,	,,	,,	,,	1915 Year ,,	,,	+9	,,	+10
,,	14	,,	VII*a*	February 2*h* 51*m*	,,	6	,,	+6
,,	17	,,	VIII*a*	July 6*h* 50*m*	,,	+40	,,	+49
,,	,,	,,	,,	December 11*h* 50*m*	,,	+11	,,	+17
,,	19	,,	VIII*e*	June 12*h* 51*m*	,,	+6	,,	−87
,,	,,	,,	,,	Year ,,	,,	−48	,,	−56
,,	,,	,,	VIII*f*	1915 April to September 13*h*	,,	−76	,,	−92
,,	,,	,,	,,	1915 Year ,,	,,	−48	,,	−56

Barometric Pressure, 1911.

TABLE Ia.—*Daily and Monthly Means.*

Height of the Barometer above mean sea-level=37 feet.

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	29·973	29·944	29·940	29·794	29·812	29·767	29·697	29·756	29·819	**29·770**	29·921	29·871
2 ..	·947	·933	·943	·788	·826	·723	·722	·730	·805	·772	·950	·877
3 ..	·931	·935	·879	·803	·819	·676	·741	·666	·773	·792	**·984**	·890
4 ..	30·000	·943	·856	·826	·822	·701	·703	·735	·743	·796	·950	·898
5 ..	**·019**	·968	·864	·799	·810	·698	·632	·705	·792	·786	·911	·903
6 ..	29·965	·978	·849	·796	**·832**	·704	**·618**	·695	·823	·799	·921	·883
7 ..	·947	·989	·823	·785	·802	·659	·631	·701	·808	·840	·943	**·853**
8 ..	·961	·976	**·817**	·811	·789	·585	·655	·706	·778	·836	·955	·890
9 ..	·961	·965	·837	·808	·770	·578	·681	·666	·738	·840	·957	·938
10 ..	·932	·982	·833	·811	·778	·543	·632	·680	·756	·854	·938	·918
11 ..	·922	·981	·855	·796	·775	**·542**	·649	·762	·798	·834	·934	·895
12 ..	·915	**30·015**	·864	·809	·750	·561	·693	**·792**	·835	·865	·904	·907
13 ..	·894	29·999	·872	·843	·755	·615	·749	·763	·831	·880	·897	·948
14 ..	·907	·974	·899	·831	·738	·696	·755	·706	·835	·884	·876	·952
15 ..	·904	·965	·860	·809	·761	·743	·730	·683	·850	·865	·857	·942
16 ..	·909	·952	·847	·824	·774	·701	·720	·685	**·851**	·836	·849	·957
17 ..	·928	·932	·924	·837	·770	·651	·710	·694	·843	·837	·844	·962
18 ..	·923	·963	**·957**	·828	·743	·630	·713	·675	·817	·886	·855	·956
19 ..	·901	·985	·922	·861	·709	·639	·725	**·664**	·792	·923	·872	·981
20 ..	·885	30·007	·920	·927	·731	·670	·747	·707	·799	·888	·862	·971
21 ..	·909	·012	·896	**·945**	·730	·703	·725	·740	·801	·883	·791	·976
22 ..	·926	29·932	·873	·908	·708	·766	·714	·747	·767	·893	·756	·970
23 ..	·880	**·885**	·868	·873	**·705**	**·805**	·719	·717	·750	·909	·752	·953
24 ..	**·815**	·931	·876	·861	·721	·791	·764	·726	**·722**	·904	**·735**	·972
25 ..	·822	·959	·868	·875	·751	·767	·744	·767	·736	·906	·766	**·989**
26 ..	·863	·915	·894	·860	·770	·777	·739	·773	·770	·939	·793	·925
27 ..	·913	·903	·901	·821	·778	·787	·774	·775	·799	**·978**	·845	·899
28 ..	·853	·923	·887	·793	·749	·800	**·775**	·780	·801	·971	·887	·940
29 ..	·870		·837	**·736**	·721	·768	·713	·779	·778	·960	·903	·924
30 ..	·913		·881	·777	·718	·716	·662	·744	·780	·962	·875	·905
31 ..	·931		·863		·763		·674	·767		·932		·929
Monthly Mean.	29·917	29·959	29·877	29·828	29·763	29·692	29·707	29·730	29·793	29·872	29·876	29·928
Annual Variation.	+·089	+·131	+·049	·000	−·065	−·136	−·121	−·098	−·035	+·044	+·048	+·100

Annual mean .. In. 29·828

TABLE Ib.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0.001 inch.

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 7	+ 6	+ 12	+ 14	+ 3	0	+ 4	+ 6	+ 4	+ 8	− 4	+ 3	+ 2	+ 5
1 7	− 2	− 4	− 1	− 9	− 10	− 13	− 11	− 13	− 8	− 17	− 11	− 7	− 9
2 7	− 16	− 19	− 18	− 24	− 24	− 24	− 23	− 28	− 24	− 27	− 22	− 22	− 23
3 7	− 24	− 29	− 23	− 28	− 29	− 28	− 29	**− 37**	− 31	− 27	− 27	− 29	− 28
4 7	− 23	− 29	− 23	− 26	− 25	− 27	− 29	− 34	− 28	− 21	− 24	− 26	− 26
5 7	− 15	− 21	− 12	− 12	− 12	− 20	− 22	− 27	− 15	− 7	− 12	− 15	− 16
6 7	0	− 1	+ 6	+ 7	+ 7	− 2	− 7	− 14	− 3	+ 14	+ 9	+ 1	+ 1
7 7	+ 22	+ 22	+ 27	+ 29	+ 25	+ 21	+ 9	+ 5	+ 20	+ 34	+ 30	+ 23	+ 22
8 7	+ 44	+ 45	+ 48	+ 52	+ 43	+ 31	+ 21	+ 22	+ 38	+ 52	+ 51	+ 51	+ 41
9 7	**+ 62**	+ 62	+ 61	**+ 60**	**+ 54**	+ 38	+ 30	+ 34	+ 49	**+ 63**	**+ 63**	**+ 70**	**+ 54**
10 7	+ 60	**+ 66**	**+ 63**	+ 59	+ 53	**+ 41**	**+ 33**	**+ 37**	**+ 50**	+ 57	+ 57	+ 63	+ 53
11 7	+ 44	+ 49	+ 48	+ 47	+ 43	+ 35	+ 30	+ 32	+ 41	+ 37	+ 36	+ 41	+ 40
12 7	+ 14	+ 22	+ 21	+ 26	+ 27	+ 24	+ 18	+ 20	+ 20	+ 10	+ 4	+ 5	+ 18
13 7	− 20	− 9	− 9	− 2	+ 4	+ 6	+ 5	+ 2	− 4	− 17	− 25	− 24	− 8
14 7	− 43	− 35	− 34	− 28	− 19	− 11	− 12	− 14	− 25	− 40	− 45	− 43	− 29
15 7	**− 54**	− 55	− 54	− 45	− 36	− 29	− 24	− 24	− 39	**− 53**	**− 52**	**− 52**	− 43
16 7	− 53	**− 56**	**− 58**	**− 53**	**− 46**	**− 38**	**− 34**	− 30	**− 44**	− 50	− 47	− 48	**− 46**
17 7	− 44	− 49	− 52	− 48	− 44	− 37	− 29	− 25	− 38	− 40	− 39	− 38	− 40
18 7	− 29	− 34	− 39	− 37	− 33	− 27	− 18	− 14	− 26	− 24	− 23	− 23	− 27
19 7	− 6	− 15	− 21	− 18	− 15	− 12	− 1	+ 2	− 10	− 2	− 2	− 1	− 8
20 7	+ 14	+ 8	0	− 1	0	+ 6	+ 11	+ 16	+ 7	+ 14	+ 15	+ 14	+ 9
21 7	+ 26	+ 23	+ 18	+ 14	+ 11	+ 17	+ 22	+ 28	+ 21	+ 21	+ 23	+ 24	+ 21
22 7	+ 25	+ 27	+ 24	+ 20	+ 17	+ 24	+ 27	+ 30	+ 22	+ 18	+ 23	+ 23	+ 23
23 7	+ 16	+ 22	+ 21	+ 15	+ 13	+ 17	+ 22	+ 22	+ 16	+ 12	+ 14	+ 14	+ 17
Range	116	122	121	113	100	79	67	74	94	116	115	122	100

Temperature of the Air, 1911.

TABLE IIa.—*Daily and Monthly Means.*

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	74·4	**67·7**	75·1	80·5	**82·6**	**86·1**	84·1	79·5	79·0	81·9	82·6	80·7
2 ..	73·7	67·7	**75·0**	80·1	82·8	85·4	**84·6**	80·9	79·3	81·7	**82·7**	81·0
3 ..	74·1	70·1	75·0	79·5	83·0	85·4	84·2	81·1	**78·2**	81·8	82·0	81·0
4 ..	73·9	71·8	75·7	78·4	83·2	83·1	82·4	77·7	79·7	81·9	81·2	81·0
5 ..	70·9	72·4	76·5	**77·2**	84·4	82·8	82·2	76·2	81·1	82·5	80·8	80·2
6 ..	70·2	73·2	77·4	78·1	84·8	83·9	80·7	**75·9**	81·0	82·8	81·2	78·9
7 ..	71·6	72·4	76·9	79·0	83·8	85·0	79·8	79·3	81·1	82·6	81·5	78·8
8 ..	73·9	72·3	76·7	81·0	83·8	84·6	78·8	80·8	81·0	82·5	80·7	80·2
9 ..	75·9	72·2	76·8	79·7	83·3	82·0	**77·3**	80·9	80·3	83·3	80·4	**81·8**
10 ..	76·4	71·8	77·6	78·7	84·1	82·2	78·2	81·1	81·4	83·0	80·8	80·8
11 ..	75·9	72·9	77·8	77·9	84·4	**80·1**	81·3	80·8	81·3	82·1	80·1	79·7
12 ..	75·4	76·8	77·9	78·5	83·6	80·4	81·9	**81·3**	80·7	82·1	79·8	79·3
13 ..	75·1	77·1	75·3	80·0	83·3	80·3	82·2	81·0	81·1	82·2	80·3	78·8
14 ..	74·0	76·3	75·8	79·3	83·7	81·8	82·0	80·4	81·1	82·4	80·3	79·5
15 ..	74·5	75·7	78·2	79·9	84·7	82·2	81·7	80·9	80·6	82·5	80·0	78·8
16 ..	76·2	75·0	78·5	79·6	84·2	80·1	82·4	80·5	80·1	82·7	80·3	79·2
17 ..	75·6	74·6	79·7	79·8	84·2	82·9	82·7	80·9	81·0	**84·1**	81·1	78·2
18 ..	76·4	73·8	77·3	80·4	84·3	83·1	82·7	80·7	81·0	84·0	81·1	77·7
19 ..	77·4	74·4	75·6	81·2	84·4	83·2	82·3	79·8	80·9	82·9	79·9	77·5
20 ..	78·4	75·9	75·7	80·6	85·3	83·5	82·1	81·1	81·4	82·7	78·8	77·3
21 ..	**79·3**	76·1	77·5	80·4	84·8	83·6	82·6	80·6	81·0	83·2	78·2	77·6
22 ..	78·9	77·7	78·6	80·8	84·9	83·5	81·8	80·2	80·4	83·4	78·8	77·7
23 ..	77·2	**78·3**	79·7	80·2	85·0	83·7	82·4	79·8	80·2	81·9	**78·0**	77·5
24 ..	76·2	78·2	79·8	80·5	85·7	83·7	82·5	80·4	80·0	81·6	79·7	78·9
25 ..	74·5	77·3	80·1	81·4	86·4	82·9	82·3	81·2	80·4	80·6	80·3	79·0
26 ..	73·9	77·8	78·9	84·0	86·2	83·2	82·3	79·9	81·5	80·1	80·1	77·2
27 ..	71·0	77·5	78·5	84·1	**86·8**	83·0	81·6	80·1	81·6	79·6	79·8	78·7
28 ..	**69·7**	76·3	78·9	**84·2**	86·7	83·7	82·5	79·1	**81·8**	79·6	80·5	79·2
29 ..	71·4	—	**80·8**	82·8	86·6	84·2	82·2	78·0	81·6	**78·7**	81·1	79·2
30 ..	72·7		80·5	81·7	86·7	84·2	79·2	77·4	81·3	80·0	**81·1**	77·5
31 ..	71·8		80·5		86·7		79·5	79·3		81·5		**75·8**
Monthly Mean.	74·5	74·4	77·7	80·3	84·7	83·1	81·7	79·9	80·7	82·0	80·4	79·0
Annual Variation.	−5·4	−5·5	−2·2	+0·4	+4·8	+3·2	+1·8	0·0	+0·8	+2·1	+0·5	−0·9

Annual mean .. ..79°.9

TABLE IIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.	°	°	°	°	°	°	°	°	°	°	°	°	°
0 2	− 2·0	− 2·6	− 2·1	− 1·9	− 2·1	− 1·0	− 0·9	− 0·7	− 1·3	− 1·8	− 1·6	− 2·4	− 1·7
1 2	− 2·3	− 3·2	− 2·4	− 2·2	− 2·4	− 1·4	− 1·0	− 0·9	− 1·4	− 2·1	− 2·2	− 2·9	− 2·0
2 2	− 2·5	− 3·3	− 2·6	− 2·5	− 2·6	− 1·5	− 1·0	− 1·0	− 1·6	− 2·1	− 2·6	− 3·3	− 2·2
3 2	− 2·8	− 3·6	− 3·1	− 2·9	− 2·9	− 1·7	− 1·1	− 1·1	− 1·9	− 2·4	− 3·0	− 3·7	− 2·5
4 2	− 3·1	− 3·9	− 3·5	− 3·2	− 3·1	− 1·7	− 1·3	− 1·2	− 1·9	− 2·6	− 3·2	− 3·7	− 2·7
5 2	− 3·5	− 4·5	− 3·9	− 3·6	− 3·4	− 1·8	− 1·5	− 1·1	− 2·0	− 3·0	− 3·6	− 4·0	− 3·0
6 2	− 4·0	− 5·2	− 4·2	− 3·8	− 3·2	− 1·8	− 1·4	− 1·1	− 1·9	− 3·1	− 3·8	− 4·2	− 3·1
7 2	− 4·3	− 5·3	− 3·8	− 2·8	− 2·3	− 1·6	− 1·2	− 0·9	− 1·7	− 2·6	− 3·7	− 4·3	− 2·9
8 2	− 2·9	− 3·5	− 1·8	− 0·8	− 0·7	− 0·6	− 0·4	− 0·5	− 0·8	− 1·5	− 2·2	− 3·1	− 1·6
9 2	− 1·4	− 1·5	− 0·2	+ 0·7	+ 0·6	0	+ 0·3	− 0·1	+ 0·1	− 0·3	− 0·9	− 1·6	− 0·4
10 2	+ 1·0	+ 1·0	+ 1·7	+ 2·1	+ 1·9	+ 1·1	+ 1·2	+ 0·9	+ 1·2	+ 1·4	+ 1·0	+ 0·6	− 1·3
11 2	+ 2·8	+ 3·6	+ 2·9	+ 3·1	+ 2·9	+ 1·7	+ 1·5	+ 1·5	+ 1·9	+ 2·6	+ 2·6	+ 2·7	+ 2·5
12 2	+ 4·4	+ 5·5	+ 3·8	+ 3·9	+ 3·7	+ 2·2	+ 1·9	+ 1·8	+ 2·5	+ 3·8	+ 4·3	+ 4·9	+ 3·6
13 2	+ 5·2	+ 6·3	+ 4·3	+ 4·1	+ 4·1	+ 2·6	+ 1·8	+ 1·8	+ 2·5	+ 4·2	+ 4·7	+ 5·9	+ 4·0
14 2	+ 5·2	+ 6·4	+ 4·6	+ 4·3	+ 4·4	+ 2·8	+ 1·9	+ 1·8	+ 2·9	+ 4·3	+ 4·8	+ 6·1	+ 4·1
15 2	+ 4·9	+ 5·9	+ 4·4	+ 4·1	+ 3·9	+ 2·8	+ 1·6	+ 1·7	+ 2·8	+ 4·0	+ 4·6	+ 5·9	+ 3·9
16 2	+ 4·3	+ 5·1	+ 3·9	+ 3·6	+ 3·4	+ 2·0	+ 1·4	+ 1·3	+ 2·4	+ 3·3	+ 3·8	+ 5·0	+ 3·3
17 2	+ 2·9	+ 3·6	+ 2·8	+ 2·6	+ 2·3	+ 1·2	+ 1·0	+ 1·0	+ 1·5	+ 1·8	+ 2·2	+ 3·0	+ 2·2
18 2	+ 1·4	+ 1·8	+ 1·2	+ 0·9	+ 0·6	+ 0·4	+ 0·2	+ 0·2	+ 0·2	+ 0·5	+ 1·2	+ 1·5	+ 0·8
19 2	+ 0·6	+ 0·9	+ 0·3	− 0·2	− 0·5	− 0·2	− 0·3	− 0·4	− 0·3	− 0·1	+ 0·7	+ 0·8	+ 0·1
20 2	+ 0·1	+ 0·3	0	− 0·7	− 0·9	− 0·4	− 0·5	− 0·6	− 0·6	− 0·4	+ 0·3	+ 0·2	− 0·3
21 2	− 0·5	− 0·4	− 0·5	− 1·2	− 1·2	− 0·7	− 0·7	− 0·7	− 0·8	− 0·9	− 0·3	− 0·5	− 0·7
22 2	− 1·1	− 1·2	− 0·9	− 1·4	− 1·5	− 0·7	− 0·7	− 0·8	− 0·9	− 1·3	− 0·8	− 1·1	− 1·0
23 2	− 1·8	− 2·0	− 1·5	− 1·7	− 1·8	− 0·9	− 0·8	− 0·8	− 1·1	− 1·7	− 1·3	− 2·0	− 1·4
Range	9·5	11·7	8·8	8·1	7·8	4·6	3·4	3·0	4·9	7·4	8·6	10·4	7·2

Temperature of the Air, 1911.

TABLE IIc.—*Showing the maximum Temperature of the Air on each day during the year* 1911.

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	82·1	77·1	83·3	89·1	88·3	**93·0**	88·9	82·1	83·9	87·1	**92·4**	87·1
2 ..	82·1	81·1	83·7	88·4	88·9	92·9	**89·4**	85·1	85·1	87·1	92·2	88·9
3 ..	81·1	82·1	82·9	89·1	89·3	92·4	88·3	86·1	79·5	88·1	90·2	88·1
4 ..	80·2	85·1	84·5	86·3	89·7	88·1	86·3	79·8	84·5	88·1	88·5	88·9
5 ..	80·4	84·1	85·6	85·4	91·4	88·7	85·6	80·9	86·3	88·9	89·4	88·8
6 ..	79·3	82·9	85·8	86·2	91·2	89·1	83·9	79·0	86·6	88·9	88·8	88·1
7 ..	80·4	82·3	85·9	87·4	90·6	91·1	86·3	83·5	86·7	88·5	88·2	87·1
8 ..	83·9	81·1	85·1	90·2	90·2	90·2	81·5	85·2	85·3	87·0	89·5	88·9
9 ..	85·3	80·8	84·5	87·9	90·2	85·1	81·1	83·9	85·4	89·1	89·5	89·5
10 ..	84·9	81·9	84·1	86·9	92·3	85·3	82·3	**86·3**	86·6	89·1	89·3	89·2
11 ..	84·1	82·5	84·4	86·6	92·3	82·6	85·2	85·7	85·9	88·2	89·0	88·0
12 ..	83·7	90·4	85·7	85·9	91·2	81·9	85·0	86·0	85·3	89·0	88·1	88·3
13 ..	82·5	**91·2**	82·1	87·9	90·7	83·1	84·4	85·0	86·3	88·6	87·4	89·2
14 ..	81·3	90·4	84·3	87·8	91·2	86·6	85·5	84·6	86·5	88·3	88·1	**91·0**
15 ..	84·3	85·9	**90·0**	87·1	92·0	87·1	85·1	84·6	86·1	88·5	89·4	88·2
16 ..	84·6	85·3	85·1	87·3	90·4	83·3	85·9	83·2	85·6	89·1	89·1	88·3
17 ..	83·3	84·4	85·5	86·6	91·0	87·2	86·2	84·4	86·1	**93·0**	88·1	87·6
18 ..	84·7	82·9	84·7	87·1	90·2	87·5	86·4	85·1	85·8	91·0	88·1	87·1
19 ..	85·9	83·6	84·3	88·1	91·1	87·7	86·3	81·9	87·0	89·5	86·9	86·6
20 ..	89·3	85·1	85·9	88·2	91·3	88·5	86·5	85·0	87·1	89·6	87·6	86·9
21 ..	89·9	84·2	88·0	89·1	91·2	88·1	87·4	85·4	86·9	91·1	87·6	86·5
22 ..	**90·7**	86·9	89·1	89·8	92·0	88·1	86·2	83·9	86·4	92·2	86·6	86·9
23 ..	85·3	86·1	89·0	87·6	92·4	89·1	86·7	84·1	86·3	89·6	82·4	86·9
24 ..	84·1	86·7	87·1	88·5	92·6	89·6	86·9	84·2	84·3	88·1	87·7	89·1
25 ..	81·4	84·1	88·3	88·1	92·8	87·6	86·4	86·1	83·3	87·1	86·1	87·3
26 ..	80·0	85·9	87·1	**92·2**	92·0	88·9	86·9	84·1	86·1	86·1	83·9	86·5
27 ..	77·5	85·1	86·1	89·3	93·2	89·0	86·3	86·1	86·9	86·3	82·9	88·3
28 ..	79·2	84·3	86·6	89·1	93·2	89·7	87·5	83·6	**87·5**	87·1	85·0	85·0
29 ..	81·1		89·3	91·6	**94·2**	90·2	87·7	81·3	87·3	87·2	88·1	87·2
30 ..	82·0		86·9	89·1	94·2	89·3	81·7	78·8	87·3	87·6	87·1	85·6
31 ..	77·1		89·1		92·8		80·9	85·1		90·6		84·5
Monthly Mean.	**83·0**	84·4	85·9	88·1	**91·4**	88·0	85·6	83·9	85·8	88·7	87·9	87·7

Annual mean .. .. 86·7°
The greatest maximum temperature recorded during the year (that of 29th May was) .. .. 94·2

TABLE IId.—*Showing the minimum Temperature of the Air on each day during the year* 1911.

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	69·3	61·8	71·3	76·8	**78·4**	83·4	81·3	76·9	76·0	77·6	75·4	77·4
2 ..	69·3	**58·6**	70·8	75·8	78·5	82·4	81·2	77·4	76·4	78·1	75·8	76·2
3 ..	70·3	62·8	70·5	74·9	78·8	81·9	81·4	78·4	76·2	78·0	77·4	76·4
4 ..	71·8	64·3	70·3	75·4	79·4	78·6	78·8	75·9	76·1	78·9	76·0	75·9
5 ..	65·1	66·3	71·3	**72·8**	81·4	79·8	78·6	**74·4**	77·6	80·4	75·4	75·2
6 ..	64·3	66·7	71·8	73·3	80·6	80·1	77·2	74·4	78·4	79·4	75·4	72·3
7 ..	64·3	64·8	72·7	72·8	80·2	80·4	77·0	74·4	78·4	78·5	76·4	73·3
8 ..	67·9	67·3	71·3	76·1	79·4	82·4	76·6	77·4	78·4	79·8	75·5	75·4
9 ..	70·3	67·3	71·8	75·4	78·9	79·6	**74·6**	79·4	76·4	79·9	74·8	78·4
10 ..	71·8	62·8	72·3	74·4	78·4	79·5	75·1	78·9	78·8	79·4	75·8	76·7
11 ..	69·5	64·3	73·4	73·3	80·4	76·4	75·4	77·4	78·4	78·6	75·0	75·0
12 ..	70·3	68·5	74·1	73·8	80·2	79·2	77·4	78·4	77·8	78·5	75·4	75·4
13 ..	70·3	71·5	72·9	75·8	80·4	76·4	80·5	79·2	78·2	79·4	74·9	72·3
14 ..	69·5	69·3	70·5	74·4	80·8	**76·2**	80·4	77·2	78·4	79·4	75·4	72·5
15 ..	68·3	68·8	71·3	75·4	81·4	77·4	79·6	76·4	77·4	79·6	73·3	72·3
16 ..	71·3	69·0	73·3	75·6	80·4	76·9	80·6	78·6	77·4	78·7	74·4	74·4
17 ..	71·8	68·3	76·7	76·7	79·6	77·4	80·4	79·1	77·4	77·8	74·4	72·5
18 ..	71·3	69·8	74·9	75·4	80·4	80·4	79·9	78·4	78·2	79·9	76·4	72·3
19 ..	72·0	67·8	71·3	77·2	79·6	80·6	79·4	76·4	76·9	79·1	76·2	70·3
20 ..	71·3	71·2	**69·3**	77·5	81·4	81·4	80·4	77·6	77·6	79·4	**72·5**	**70·1**
21 ..	74·3	70·8	70·5	76·4	80·2	80·8	79·4	77·6	77·4	78·4	73·3	71·5
22 ..	73·3	70·8	72·0	76·4	80·4	81·2	79·2	77·4	**75·6**	77·3	73·5	71·3
23 ..	72·8	71·5	72·3	76·8	81·4	80·7	80·5	77·4	77·4	76·9	74·4	71·5
24 ..	71·4	72·6	76·1	76·0	82·7	81·1	79·4	76·4	76·6	78·2	75·4	72·5
25 ..	70·3	73·3	76·0	77·4	82·7	80·3	79·9	78·9	78·4	75·6	77·4	73·1
26 ..	71·8	72·8	74·4	78·5	81·9	78·4	79·4	77·4	78·2	76·1	77·2	71·5
27 ..	68·7	72·5	73·8	80·4	83·4	80·4	78·2	76·9	78·4	75·6	77·4	72·5
28 ..	**61·3**	71·7	73·3	80·4	83·4	80·7	79·4	75·9	79·0	75·4	77·9	76·4
29 ..	63·3		74·8	78·4	83·4	81·4	80·4	76·0	77·4	**73·5**	77·4	74·4
30 ..	65·3		75·4	76·4	83·4	81·4	76·1	76·2	77·0	75·9	78·1	72·6
31 ..	71·2		75·9		83·4		76·9	76·4		75·6		70·3
Monthly Mean.	69·5	**68·1**	72·8	76·0	**80·8**	79·9	78·9	77·2	77·5	78·0	75·6	73·6

Annual mean .. .. 75·7°
The least minimum temperature recorded during the year (that of 2nd February) was .. 58·6

Pressure of Vapour, 1911.

TABLE IIIa.—*Daily and Monthly Means.*

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	0·656	0·293	0·625	0·736	0·852	0·952	0·907	0·895	0·871	0·861	0·780	0·897
2 ..	·656	·336	·590	·793	·850	·932	·918	·893	·863	·807	·825	·835
3 ..	·683	·482	·634	·752	·856	·961	·913	·871	·852	·844	·843	·812
4 ..	·604	·531	·662	·718	·889	·945	·920	·842	·873	·876	·836	·775
5 ..	·508	·549	·714	·718	·923	·967	·927	·836	·886	·912	·788	·737
6 ..	·464	·571	·700	·744	·937	·969	·911	·851	·873	·929	·806	·690
7 ..	·530	·493	·715	·796	·920	·976	·905	·896	·860	·930	·834	·661
8 ..	·615	·571	·685	·687	·889	·983	·875	·898	·856	·942	·814	·734
9 ..	·692	·568	·702	·762	·894	·931	·857	·880	·841	·943	·792	·832
10 ..	·638	·485	·671	·741	·867	·963	·880	·883	·862	·921	·782	·786
11 ..	·655	·538	·705	·739	·881	·928	·921	·883	·868	·882	·779	·738
12 ..	·692	·565	·681	·740	·920	·943	·929	·877	·855	·865	·836	·713
13 ..	·691	·555	·537	·739	·933	·934	·935	·881	·857	·880	·831	·662
14 ..	·626	·599	·569	·785	·931	·940	·924	·858	·855	·886	·766	·623
15 ..	·603	·626	·595	·820	·940	·957	·922	·869	·848	·908	·705	·668
16 ..	·720	·648	·746	·803	·928	·918	·925	·880	·870	·952	·724	·680
17 ..	·755	·632	·814	·737	·910	·957	·921	·887	·840	·933	·762	·664
18 ..	·753	·636	·686	·738	·896	·955	·921	·875	·836	·929	·768	·666
19 ..	·760	·559	·577	·795	·878	·956	·916	·875	·838	·952	·742	·655
20 ..	·725	·697	·496	·775	·900	·950	·914	·891	·820	·902	·652	·592
21 ..	·690	·733	·617	·830	·878	·955	·904	·886	·815	·894	·725	·649
22 ..	·696	·710	·676	·833	·893	·928	·895	·869	·808	·885	·761	·663
23 ..	·720	·663	·647	·826	·908	·910	·893	·854	·815	·854	·805	·679
24 ..	·745	·745	·633	·828	·929	·891	·905	·856	·854	·861	·813	·612
25 ..	·680	·806	·719	·840	·965	·893	·897	·882	·872	·794	·851	·591
26 ..	·582	·738	·776	·803	·971	·910	·884	·876	·902	·756	·880	·625
27 ..	·492	·704	·721	·853	·958	·913	·887	·864	·893	·708	·863	·637
28 ..	·399	·684	·712	·876	·940	·909	·895	·844	·893	·712	·868	·679
29 ..	·450		·728	·846	·943	·893	·913	·853	·874	·727	·843	·678
30 ..	·564		·823	·861	·947	·924	·890	·870	·858	·799	·871	·721
31 ..	·589		·825		·945		·894	·878		·803		·631
Monthly Mean.	0·633	0·597	0·677	0·784	0·912	0·938	0·906	0·873	0·857	0·866	0·798	0·696
Annual Variation ..	—·162	—·198	—·118	—·011	+·117	+·143	+·111	+·078	+·062	+·071	+·003	—·099

Annual mean .. .. In. 0·795

TABLE IIIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0.001 inch.

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 2	— 6	+ 30	+ 5	— 5	0	0	— 5	— 8	— 17	— 13	+ 12	+ 13	0
1 2	— 8	+ 15	+ 16	— 9	— 12	— 9	— 10	— 14	— 15	— 16	— 4	+ 18	— 4
2 2	— 3	+ 8	+ 10	— 8	— 15	— 15	— 12	— 14	— 17	— 13	— 12	+ 1	— 7
3 2	— 10	— 15	+ 8	— 12	— 16	— 14	— 11	— 15	— 26	— 11	— 17	— 21	— 13
4 2	— 11	— 33	— 5	— 12	— 18	— 19	— 12	— 15	— 23	— 8	— 25	— 26	— 17
5 2	— 25	— 49	— 17	— 20	— 19	— 24	— 18	— 15	— 22	— 13	— 38	— 33	— 24
6 2	— 36	— 55	— 13	— 22	— 17	— 15	— 15	— 17	— 14	— 10	— 38	— 38	— 24
7 2	— 42	— 50	— 14	— 9	— 11	— 13	— 13	— 14	— 2	+ 4	— 35	— 38	— 20
8 2	— 31	— 51	— 12	— 2	— 2	— 1	+ 3	0	+ 13	+ 13	— 23	— 40	— 11
9 2	— 27	— 43	— 14	— 1	+ 4	+ 4	+ 11	+ 2	+ 23	+ 16	— 15	— 43	— 7
10 2	— 8	— 45	— 11	+ 8	+ 6	+ 14	+ 20	+ 16	+ 31	+ 19	— 21	— 42	— 1
11 2	— 8	— 52	— 8	+ 13	+ 13	+ 19	+ 22	+ 26	+ 31	+ 13	— 34	— 58	— 2
12 2	— 18	— 29	— 2	+ 13	+ 18	+ 26	+ 25	+ 23	+ 32	+ 14	— 25	— 57	+ 2
13 2	— 6	— 7	+ 5	+ 12	+ 20	+ 23	+ 22	+ 25	+ 22	+ 9	— 7	— 52	+ 6
14 2	+ 16	+ 37	+ 19	+ 15	+ 19	+ 20	+ 25	4+ 24	+ 31	+ 19	+ 14	— 11	+ 19
15 2	+ 29	+ 50	+ 18	+ 13	+ 10	+ 22	+ 12	+ 21	+ 18	+ 14	+ 25	+ 13	+ 20
16 2	+ 33	+ 63	+ 7	— 2	+ 10	+ 11	+ 15	+ 12	+ 11	+ 16	+ 25	+ 33	+ 19
17 2	+ 33	+ 60	+ 2	— 1	+ 8	+ 2	+ 4	+ 6	0	— 3	+ 27	+ 53	+ 16
18 2	+ 40	+ 45	— 10	— 6	+ 3	— 7	— 8	— 7	— 12	— 3	+ 31	+ 69	+ 11
19 2	+ 33	+ 36	— 13	0	— 5	— 12	— 12	— 6	— 13	— 4	+ 36	+ 74	+ 9
20 2	+ 36	+ 35	— 2	+ 10	+ 1	— 6	— 6	— 8	— 16	— 4	+ 48	+ 76	+ 14
21 2	+ 24	+ 31	+ 4	+ 13	0	— 4	— 12	— 7	— 14	— 10	+ 40	+ 59	+ 10
22 2	+ 11	+ 8	+ 10	+ 11	+ 3	+ 2	— 7	— 10	— 10	— 13	+ 26	+ 41	+ 6
23 2	— 6	+ 11	+ 11	+ 3	0	— 5	— 10	— 9	— 17	— 18	+ 14	+ 15	— 1
Range.	82	118	36	37	39	50	43	43	59	37	86	134	44

Additional Capacity of the Air, 1911.

TABLE IV*a*.—*Daily and Monthly Means.*

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In	In.	In.	In.	In.	In.	In.	In	In.	In.	In.	In.
1 ..	0·197	0·388	0·250	0·306	0·264	0·297	0·264	0·112	0·120	0·229	0·342	0·152
2 ..	·179	·354	·281	·237	·275	·291	·271	·162	·140	·277	·301	·226
3 ..	·162	·266	·239	·259	·275	·260	·261	·190	·112	·244	·256	·249
4 ..	·233	·263	·230	·257	·250	·189	·186	·109	·143	·214	·231	·286
5 ..	·253	·255	·203	·218	·258	·156	·172	·067	·176	·198	·270	·299
6 ..	·278	·251	·243	·222	·261	·196	·136	·044	·185	·196	·263	·303
7 ..	·248	·308	·215	·198	·242	·226	·114	·106	·201	·188	·246	·327
8 ..	·229	·226	·238	·374	·273	·205	·107	·155	·201	·167	·238	·304
9 ..	·211	·227	·224	·254	·250	·161	·079	·173	·194	·198	·251	·257
10 ..	·276	·301	·279	·243	·308	·137	·085	·178	·212	·212	·274	·270
11 ..	·243	·278	·251	·218	·302	·099	·151	·171	·201	·217	·254	·282
12 ..	·191	·372	·277	·238	·231	·095	·161	·194	·194	·233	·186	·294
13 ..	·183	·391	·340	·290	·211	·101	·167	·177	·205	·221	·207	·331
14 ..	·215	·322	·326	·219	·225	·147	·170	·180	·207	·221	·274	·395
15 ..	·255	·271	·382	·204	·256	·143	·160	·185	·197	·205	·326	325
16 ..	·187	·227	·231	·211	·251	·108	·184	·160	·159	·169	·315	·324
17 ..	·133	·230	·201	·283	·267	·168	·197	·166	·221	·242	·304	·308
18 ..	·159	·201	·252	·302	·286	·179	·198	·173	·223	·238	·296	·290
19 ..	·184	·297	·311	·272	·307	·181	·189	·142	·217	·174	·279	·294
20 ..	·255	·202	·398	·272	·318	·199	·183	·170	·253	·218	·335	·350
21 ..	·317	·169	·336	·212	·322	·198	·211	·161	·243	·248	·241	·304
22 ..	·301	·247	·308	·223	·308	·221	·190	·162	·234	·265	·225	·292
23 ..	·218	·310	·374	·206	·298	·245	·214	·164	·216	·243	·156	·272
24 ..	·162	·226	·384	·218	·303	·266	·208	·180	·170	·223	·203	·387
25 ..	·175	·133	·310	·224	·299	·235	·206	·183	·165	·254	·183	·408
26 ..	·257	·218	·216	·370	·282	·228	·219	·145	·174	·275	·149	·316
27 ..	·268	·242	·257	·319	·320	·217	·193	·164	·186	·304	·155	·355
28 ..	·336	·226	·280	·298	·334	·249	·219	·151	·196	·302	·173	·318
29 ..	·325		·327	·281	·328	·283	·188	·106	·206	·260	·222	·324
30 ..	·243		·220	·224	·328	·253	·107	·070	·213	·230	·191	·225
31 ..	·193		·220		·327		·113	·122		·281		·266
Monthly Mean.	0·228	0·264	0·278	0·255	0·283	0·198	0·178	0·149	0·192	0·231	0·245	0·301
Annual Variation.	—·005	+·031	+·045	+·022	+·050	—·035	—·055	—·084	—·041	—·002	+·012	+·068

Annual Mean .. 0·233 In.

TABLE IV*b*.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0.001 inch.

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 2	— 55	—107	— 73	— 62	— 82	— 39	— 29	— 18	— 27	— 53	— 71	— 95	— 59
1 2	— 60	—107	— 92	— 66	— 80	— 45	— 27	— 18	— 34	— 58	— 73	—113	— 64
2 2	— 71	—102	— 93	— 77	— 83	— 44	— 25	— 20	— 37	— 65	— 78	—108	— 67
3 2	— 72	— 87	—105	— 86	— 93	— 52	— 29	— 21	— 39	— 73	— 84	— 97	— 70
4 2	— 80	— 77	—103	— 94	— 99	— 47	— 34	— 25	— 40	— 84	— 85	— 95	— 72
5 2	— 75	— 77	—102	—100	—107	— 45	— 35	— 22	— 46	— 91	— 86	— 96	— 73
6 2	— 76	— 89	—114	—103	—104	— 52	— 35	— 19	— 50	— 99	— 89	— 96	— 77
7 2	— 76	— 94	—103	— 85	— 76	— 48	— 30	— 17	— 56	— 97	— 88	— 99	— 72
8 2	— 54	— 49	— 46	— 29	— 28	— 25	— 17	— 16	— 42	— 67	— 55	— 61	— 41
9 2	— 18	— 5	+ 5	+ 20	+ 15	— 5	— 3	— 7	— 21	— 29	— 22	— 14	— 7
10 2	+ 30	+ 68	+ 62	+ 61	+ 68	+ 25	+ 21	+ 14	+ 11	+ 30	+ 49	+ 59	+ 41
11 2	+ 87	+155	+100	+ 92	+ 99	+ 46	+ 33	+ 24	+ 36	+ 77	+122	+143	+ 84
12 2	+150	+194	+126	+123	+128	+ 58	+ 46	+ 40	+ 55	+124	+175	+224	+120
13 2	+167	+200	+134	+129	+142	+ 75	+ 45	+ 38	+ 59	+144	+171	+256	+130
14 2	+142	+156	+130	+136	+156	+ 81	+ 43	+ 37	+ 72	+141	+157	+223	+123
15 2	+119	+127	+123	+129	+147	+ 80	+ 46	+ 36	+ 82	+134	+138	+189	+112
16 2	+ 93	+ 87	+119	+121	+126	+ 63	+ 38	+ 31	+ 72	+104	+105	+137	+ 91
17 2	+ 48	+ 41	+ 85	+ 88	+ 81	+ 43	+ 32	+ 27	+ 50	+ 63	+ 45	+ 44	+ 54
18 2	— 4	— 1	+ 45	+ 34	+ 16	+ 20	+ 14	+ 13	+ 19	+ 17	+ 5	— 24	+ 13
19 2	— 20	— 18	+ 19	— 9	— 19	+ 2	0	— 9	+ 1	— 2	— 19	— 55	— 11
20 2	— 37	— 34	— 2	— 38	— 37	— 12	— 15	— 13	— 5	— 15	— 44	— 75	— 27
21 2	— 44	— 50	— 23	— 57	— 50	— 25	— 12	— 17	— 13	— 26	— 54	— 80	— 38
22 2	— 46	— 49	— 42	— 63	— 61	— 29	— 18	— 16	— 22	— 38	— 58	— 83	— 44
23 2	— 50	— 73	— 61	— 63	— 68	— 33	— 20	— 20	— 21	— 45	— 64	— 84	— 50
Range ..	247	307	248	239	263	133	81	65	138	243	264	369	207

Rainfall, 1911.

TABLE Va.—*Total fall of rain (in inches) as measured by F. Chambers's self-registering gauge, the funnel of which is 28 feet above the ground.*

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.				In.	In.	In.	In.	In.		In.	
1	..	..	..	..	..	..	..	0·47	0·42	..	..	..
2	..	..	..	..	..	..	0·01	0·13	0·18	..	..	..
3	..	..	..	..	..	0·07	..	0·15	**1·00**	..	..	..
4	..	..	..	..	..	0·69	0·66	1·95	0·25	..	..	..
5	..	..	..	..	..	0·48	0·21	**4·29**	..	..	..	..
6	..	..	..	..	..	0·15	0·49	4·28	0·01	..	..	..
7	..	..	..	..	..	0·13	**4·65**	0·57	0·04	..	..	..
8	..	..	..	..	..	0·05	1·90	0·05	0·05	..	..	..
9	..	..	..	..	..	..	2·15	0·03	0·10	..	..	..
10	..	..	..	..	..	0·44	1·04	0·09	..	..	..	..
11	..	..	..	..	..	**2·83**	0·23	0·05	..	..	..	..
12	..	..	..	..	..	1·35	0·30	..	..	..	..	..
13	..	..	..	..	..	1·69	..	0·09	..	..	..	..
14	..	..	..	..	..	0·17	0·02	0·41	0·01	..	..	..
15	..	..	..	..	..	0·21	0·26	0·02	0·02	..	..	..
16	..	..	..	..	..	1·94	0·01	0·23	0·12	..	..	..
17	..	..	..	..	..	0·08	..	0·01	0·01	..	..	..
18	..	..	..	..	..	0·07	0·02	0·25	..	..	..	..
19	..	..	..	..	..	..	0·02	0·20	..	..	..	..
20	..	..	..	..	..	..	0·05	0·05	..	..	..	..
21	..	..	..	..	..	0·02	0·07	0·01	0·01	..	..	..
22	..	..	..	..	..	..	0·02	0·36	..	..	..	..
23	..	..	..	..	..	..	..	0·26	..	..	**0·27**	..
24	..	..	..	..	0·01	..	0·07	0·03	0·21	..	..	..
25	..	..	..	..	..	0·09	0·08	0·02	..	..	..	..
26	..	..	..	..	**0·02**	0·05	..	0·48	..	..	..	..
27	..	..	..	..	..	..	..	0·04	..	..	..	..
28	..	..	..	..	..	..	..	0·17	..	..	..	..
29	..	..	..	..	..	..	0·14	0·35	..	..	..	..
30	..	..	..	..	..	..	2·37	1·19	..	..	..	..
31	**0·03**		..		..		0·66	0·58	..	..	..	..
Monthly Total.	0·03	..	..	..	0·03	10·51	15·43	**16·81**	2·43	..	0·27	..
Number of rainy days.	1	..	..	..	2	18	23	**30**	14	..	1	..

	In.
Total fall of rain in the year	..45·51
Total number of rainy days in the year	.. 89
The greatest daily fall of rain in the year (that of 7th July) was	.. 4·65

No rain fell in the months of February, March, April, October and December, nor on any of the days left blank in the above table.

TABLE Vb.—*Total fall of rain (in inches) as measured by Newman's gauge placed 4½ feet above the ground.*

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.				In.	In.	In.	In.	In.		In.	
1	..	..	..	..	..	..	0·01	0·51	0·41	..	..	..
2	..	..	..	..	..	..	0·01	0·14	0·21	..	..	..
3	..	..	..	..	..	0·08	..	0·17	**1·00**	..	..	..
4	..	..	..	..	..	0·72	0·68	1·89	0·23	..	..	..
5	..	..	..	..	..	0·50	0·22	4·19	..	..	..	..
6	..	..	..	..	..	0·15	0·50	**4·29**	0·01	..	..	..
7	..	..	..	..	..	0·14	**4·78**	0·56	0·04	..	..	..
8	..	..	..	..	..	0·05	1·92	0·07	0·07	..	..	..
9	..	..	..	..	..	..	2·24	0·03	0·10	..	..	..
10	..	..	..	..	..	0·50	1·07	0·09	..	..	..	..
11	..	..	..	..	..	**2·89**	0·24	0·05	..	..	..	..
12	..	..	..	..	..	1·42	0·33	..	..	..	..	..
13	..	..	..	..	..	1·74	..	0 10	..	..	..	..
14	..	..	..	..	..	0·19	0·03	0·40	0·02	..	..	..
15	..	..	..	..	..	0·19	0·24	0·02	0·03	..	..	..
16	..	..	..	..	..	1·92	0·02	0·25	0·12	..	..	..
17	..	..	..	..	..	0·10	..	0·01	0·01	..	..	..
18	..	..	..	..	..	0·09	0·04	0·25	..	..	..	..
19	..	..	..	..	..	..	0·02	0·20	..	..	..	..
20	..	..	..	..	..	..	0·07	0·05	..	..	..	..
21	..	..	..	..	..	0·02	0·08	0·02	0·01	..	..	..
22	..	..	..	..	..	..	0·03	0·38	..	..	..	..
23	..	..	..	..	..	..	..	0·27	..	..	**0·27**	..
24	..	..	..	..	0·01	..	0·07	0·03	0·23	..	..	..
25	..	..	..	..	..	0·10	0·08	0·04	0·01	..	..	..
26	0·02	..	..	..	**0·03**	0·05	..	0·48	..	..	..	..
27	..	..	..	..	..	..	..	0·04	..	..	..	..
28	..	..	..	..	..	..	..	0·19	..	..	..	..
29	..	..	..	..	..	..	0·14	0·38	..	..	..	..
30	..	..	..	..	..	..	2·41	1·21	..	..	..	..
31	**0·04**	..	..		..		0·66	0·59		..		..
Monthly Total.	0·06	..	..	..	0·04	10·85	15·89	**16·90**	2·50	..	0·27	..
Number of rainy days.	2	..	..	..	2	18	24	**30**	15	..	1	..

	In.
Total fall of rain in the year	..46·51
Total number of rainy days in the year	.. 92
The greatest daily fall of rain in the year (that of 7th July) was	.. 4·78

No rain fell in the months of February, March, April, October, and December nor on any of the days left blank in the above table.

Velocity of Wind, 1911.

Robinson Beckley's Anemograph.

Table VIa.—*Mean velocity of the wind in miles per hour, without regard to the Direction from which it blew for each day of Bombay Civil Time; also the mean monthly velocity and its variation from the mean of the year.*

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	5·6	**11·1**	7·1	**11·5**	4·8	7·7	7·2	8·9	10·6	4·3	5·7	5·5
2 ..	**3·6**	7·5	6·8	8·1	**3·7**	9·4	5·9	12·3	**11·2**	3·9	5·3	6·4
3 ..	5·7	6·2	5·9	7·7	4·1	7·7	**4·4**	14·1	9·6	5·9	4·5	**4·5**
4 ..	6·4	6·1	6·5	7·2	4·7	5·6	4·8	14·6	9·2	6·7	4·9	6·2
5 ..	**10·0**	6·5	6·8	5·6	8·1	**4·3**	4·8	11·7	10·1	6·2	5·9	6·5
6 ..	7·6	5·9	7·3	6·5	6·0	5·4	4·8	11·2	7·8	4·8	4·4	5·8
7 ..	5·7	7·1	5·5	7·4	5·2	5·4	6·8	12·2	9·2	**3·3**	4·0	5·5
8 ..	6·5	7·0	5·6	11·3	4·1	5·9	9·5	13·3	9·2	3·4	6·1	5·5
9 ..	5·4	7·4	5·9	8·5	5·6	11·1	9·7	14·0	10·8	4·5	5·3	6·1
10 ..	4·9	6·6	4·0	6·7	8·0	9·2	10·3	9·0	9·9	4·2	4·9	4·9
11 ..	5·4	7·0	4·7	6·9	7·0	10·0	10·9	11·6	5·4	5·0	4·8	6·5
12 ..	5·5	7·1	5·4	4·8	**10·8**	11·0	13·4	13·0	4·8	5·4	5·6	6·5
13 ..	4·8	8·0	9·1	4·8	8·2	**12·0**	**14·7**	12·3	4·4	6·0	5·4	6·6
14 ..	7·6	7·3	8·1	6·0	5·8	9·5	14·2	12·8	4·6	6·7	6·3	7·9
15 ..	4·0	4·5	8·6	7·1	5·6	7·9	11·6	**15·8**	5·4	7·2	4·9	5·9
16 ..	5·1	5·9	5·9	7·7	4·8	11·7	11·9	12·6	4·6	6·2	4·7	7·3
17 ..	5·9	6·7	8·3	6·7	4·0	10·3	12·2	10·6	**4·0**	6·2	4·5	5·1
18 ..	6·1	7·8	9·0	4·8	4·5	11·3	11·7	10·4	5·3	4·4	4·5	4·7
19 ..	4·5	7·8	9·7	4·8	3·8	8·8	11·1	9·4	5·2	4·0	6·6	6·2
20 ..	5·5	5·9	**11·7**	8·8	4·5	10·0	11·1	8·1	5·7	5·8	**7·7**	6·6
21 ..	6·2	5·6	6·2	8·1	4·0	10·6	11·1	9·2	5·4	5·2	7·0	4·9
22 ..	5·1	6·4	6·7	10·2	5·3	8·5	8·8	12·1	4·0	4·8	6·8	5·1
23 ..	5·1	7·3	6·7	10·3	6·3	7·2	11·2	12·5	4·5	5·1	7·4	5·4
24 ..	5·6	4·5	10·6	8·6	6·0	9·0	11·7	9·3	7·5	4·4	7·3	7·0
25 ..	4·4	**3·7**	9·7	7·8	5·0	7·9	8·4	7·7	8·6	5·1	5·1	**8·3**
26 ..	7·4	5·6	6·2	8·6	4·3	10·0	6·5	**3·7**	7·5	4·8	**3·2**	6·6
27 ..	8·6	7·0	8·9	8·1	7·9	9·2	8·1	5·6	7·5	6·6	3·8	7·0
28 ..	6·9	6·8	8·6	6·7	8·9	8·4	5·6	8·9	5·9	**7·7**	3·4	5·9
29 ..	7·7	..	9·2	6·1	8·9	7·5	9·5	9·2	4·3	5·5	4·9	5·0
30 ..	6·5		**3·6**	**4·0**	7·6	9·2	7·6	9·2	4·0	5·9	5·4	4·6
31 ..	9·6		7·2		6·9		10·8	10·0		5·0		4·8
Monthly Mean.	6·1	6·7	7·3	7·4	5·9	8·7	9·4	**10·8**	6·9	**5·3**	5·3	6·0
Annual Variation.	−1·0	−0·4	+0·2	+0·3	−1·2	+1·6	+2·3	+3·7	−0·2	−1·8	−1·8	−1·1

Table VIb.—*Showing the mean diurnal inequality of the velocity of the wind in miles per hour for each month of the year* 1911, *and for the whole year.*

1911. Bombay Civil Time. Hourly Intervals	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1	− 1·7	− **2·2**	− 1·9	− 0·5	− 1·4	− 0·2	+ 0·1	− 0·2	− 0·3	− 1·3	− 0·1	− **2·2**	− 1·0
1 „ 2	− 1·5	− 1·5	− 1·4	− 1·2	− 0·9	+ 0·1	+ 0·6	− 0·1	− 0·4	− 1·2	− 1·1	− 1·8	− 0·9
2 „ 3	− 1·2	− 1·0	− 1·8	− 1·9	− 2·1	− 0·2	+ 0·2	− 0·1	− 0·2	− 1·4	− 0·9	− 1·5	− 1·0
3 „ 4	− 0·8	− 0·7	− **2·3**	− 2·6	− 1·9	− 0·1	+ 0·4	− 0·1	− 0·5	− **1·5**	− 1·0	− 1·0	− 1·0
4 „ 5	− 0·5	− 0·8	− 2·2	− 3·6	− 2·1	+ 0·2	+ 0·5	+ 0·1	− 0·4	− 1·5	− 0·3	− 0·1	− 0·9
5 „ 6	− 1·0	− 1·3	− 2·3	− 4·0	− **2·6**	+ 0·1	+ 0·1	+ 0·1	− 0·6	− 1·2	− 0·7	+ 0·4	− 1·1
6 „ 7	− 1·0	− 1·4	− 2·0	− **4·3**	− 2·4	+ 0·4	+ 0·4	+ 0·4	− 0·6	− 0·4	− 0·7	+ 0·9	− 0·9
7 „ 8	− 1·0	− 1·1	− 2·1	− 3·7	− 2·3	+ 0·4	− 0·5	+ 0·3	− 0·7	+ 0·1	− 0·2	+ 1·1	− 0·8
8 „ 9	− 0·5	− 0·4	− 1·7	− 2·1	− 1·7	+ 0·7	+ 0·1	+ 0·1	− 0·6	+ 0·4	+ 0·1	+ 1·8	− 0·3
9 „ 10	− 0·4	− 1·1	− 1·5	− 1·2	− 0·7	+ 0·1	+ 0·6	+ 0·1	− 0·4	+ 0·1	+ 0·1	+ 0·9	− 0·3
10 „ 11	− 0·4	− 2·0	− 1·0	− 0·3	− 0·3	+ 0·3	− 0·2	− 0·2	− 0·7	− 0·8	− 1·1	− 0·1	− 0·6
11 „ 12	− 0·7	− 1·0	+ 1·0	+ 0·8	+ 1·0	+ 0·1	− 0·2	+ 0·5	+ 0·5	− 0·3	− 1·4	− 1·2	− 0·1
12 „ 13	+ 0·3	+ 0·4	+ 2·1	+ 2·3	+ 1·9	− 0·1	+ 0·1	+ 0·5	+ 1·0	+ 1·0	− 0·1	− 1·2	+ 0·7
13 „ 14	+ 0·9	+ 1·8	+ 2·9	+ 3·7	+ 2·6	+ 0·4	+ 0·4	+ 0·4	+ **1·5**	+ 2·1	+ 1·2	− 0·6	+ 1·4
14 „ 15	+ 2·0	+ 2·6	+ 4·0	+ 4·5	+ 3·3	+ 0·7	+ **0·9**	+ **1·0**	+ 1·5	+ 2·7	+ 1·9	+ 0·7	+ 2·1
15 „ 16	+ **2·7**	+ 3·4	+ **4·3**	+ **4·8**	+ **3·7**	+ 0·6	+ 0·7	+ 0·7	+ 1·3	+ **3·0**	+ **2·1**	+ 1·3	+ **2·4**
16 „ 17	+ 2·6	+ 3·2	+ 3·7	+ 3·7	+ 3·2	+ 1·0	+ 0·4	+ 0·7	+ 1·1	+ 2·8	+ 2·1	+ 1·2	+ 2·1
17 „ 18	+ 2·3	+ **3·6**	+ 3·2	+ 2·9	+ 2·7	+ 0·7	0·0	+ 0·5	+ 0·8	+ 1·6	+ 1·7	+ 1·5	+ 1·8
18 „ 19	+ 2·6	+ 2·9	+ 2·3	+ 1·6	+ 1·6	− 0·1	− 0·6	− 0·7	+ 0·3	+ 0·8	+ 1·4	+ 2·0	+ 1·2
19 „ 20	+ 2·0	+ 2·1	+ 1·8	+ 0·7	+ 0·4	− 0·7	− 0·7	− 0·4	0·0	− 0·1	+ 0·7	+ **2·1**	+ 0·7
20 „ 21	+ 0·4	+ 0·2	+ 0·6	− 0·1	0·0	− **1·2**	− 1·0	− 1·0	− 0·7	− 0·9	− 0·1	+ 0·7	− 0·3
21 „ 22	− 0·8	− 1·8	− 1·0	− 0·1	− 0·5	− 1·2	− **1·1**	− **1·1**	− 0·7	− 1·2	− 1·1	− 0·7	− 0·9
22 „ 23	− 1·8	− 2·0	− 1·8	+ 0·2	− 0·6	− 1·0	− 0·7	− 1·1	− 0·6	− 1·5	− **1·5**	− 1·5	− **1·2**
23 „ 24	− **2·1**	− 2·0	− 2·1	− 0·2	− 0·7	− 0·7	− 0·7	− 0·9	− **0·9**	− 1·0	− 1·1	− 1·9	− 1·2
Range.	4·8	5·8	6·6	9·1	6·3	2·2	2·0	2·1	2·4	4·5	3·6	4·3	3·6

	Miles.
The mean velocity for June to August ..	9·6
The mean velocity for September to May ..	6·3
The mean velocity for the year ..	7·1

Mean Daily Velocities of the North and East Components of the Wind, 1911.

Table VIc.—*Showing the Mean Velocities of the North or South and East or West Components of the Winds which blew on each day of the year* 1911.

In Miles per Hour.

1911. Date.	January. N. or S.	January. E. or W.	February. N. or S.	February. E. or W.	March. N. or S.	March. E. or W.	April. N. or S.	April. E. or W.	May. N. or S.	May. E. or W.	June. N. or S.	June. E. or W.	July. N. or S.	July. E. or W.	August. N. or S.	August. E. or W.	September. N. or S.	September. E. or W.	October. N. or S.	October. E. or W.	November. N. or S.	November. E. or W.	December. N. or S.	December. E. or W.
1 ..	2·7 N	0·0	10·2 N	1·4 W	4·8 N	3·8 W	9·1 N	6·5 W	2·1 S	2·3 W	2·9 N	7·1 W	2·9 S	6·5 W	3·1 S	8·4 W	1·7 S	10·3 W	1·2 N	3·1 W	2·8 N	0·7 E	3·4 N	2·5 W
2 ..	1·0 N	0·5 W	5·4 N	0·0	4·0 N	2·5 W	5·5 N	5·4 W	1·8 S	2·9 W	4·3 N	8·1 W	2·1 S	5·4 W	3·4 S	11·7 W	0·0	11·1 W	1·3 N	3·4 W	2·7 N	0·4 W	4·2 N	1·9 W
3 ..	2·3 S	2·5 E	3·1 N	1·0 E	2·1 N	3·2 W	3·7 N	6·2 W	1·0 S	3·9 W	3·3 N	6·2 W	0·1 N	4·3 W	2·5 S	13·6 W	0·5 N	9·3 W	2·8 N	4·0 W	0·2 N	0·1 W	2·6 N	0·7 W
4 ..	4·7 N	1·7 W	2·8 N	1·1 E	3·0 N	2·9 W	3·7 N	5·3 W	0·0	4·0 W	0·4 N	4·3 W	1·3 N	2·6 W	1·8 S	14·1 W	0·1 N	9·1 W	4·7 N	4·3 W	2·2 N	0·1 W	3·5 N	0·8 W
5 ..	8·6 N	2·6 W	2·6 N	0·9 E	4·4 N	3·8 W	2·1 N	0·5 W	3·2 N	5·9 W	1·0 S	3·3 W	2·9 N	3·2 W	2·1 S	11·2 W	0·1 S	10·1 W	4·1 N	4·3 W	3·2 N	0·3 W	3·7 N	0·6 E
6 ..	6·5 N	2·7 W	3·1 N	0·3 E	4·5 N	4·3 W	2·6 N	4·3 W	2·4 S	3·5 W	0·1 S	2·6 W	2·6 N	2·2 W	0·7 N	10·8 W	0·1 S	7·8 W	2·6 N	3·8 W	1·4 N	0·0	3·9 N	0·1 W
7 ..	3·9 N	0·8 W	5·7 N	1·9 W	2·5 N	2·3 W	4·4 N	5·2 W	1·5 S	4·7 W	1·5 S	3·8 W	1·0 N	6·0 W	0·4 N	12·1 W	0·7 S	9·1 W	0·1 N	2·6 W	0·7 S	0·7 E	3·3 N	0·7 E
8 ..	3·7 N	1·0 W	4·7 N	1·8 W	2·5 N	3·5 W	8·3 N	6·5 W	0·9 S	3·8 W	4·5 S	1·8 W	2·7 S	7·8 W	1·1 S	13·0 W	2·7 S	8·6 W	2·0 S	1·4 W	1·0 N	1·0 E	3·4 N	0·6 E
9 ..	2·1 N	1·0 E	4·7 N	2·4 W	1·0 N	2·9 W	4·8 N	6·0 W	1·9 N	4·8 W	9·0 S	3·4 E	6·7 S	3·7 W	5·5 S	12·9 W	2·5 S	10·3 W	1·5 S	1·0 W	2·4 N	1·0 E	0·4 N	1·9 E
10 ..	2·3 N	0·7 E	4·8 N	2·0 W	1·0 S	2·9 W	3·4 N	4·8 W	4·1 N	5·6 W	7·6 S	1·2 E	2·3 S	7·9 W	3·7 S	8·1 W	1·8 S	9·5 W	0·0	1·7 W	1·3 N	1·4 E	0·4 N	0·8 E
11 ..	3·4 N	0·4 E	5·1 N	2·6 W	1·9 S	0·4 W	3·4 N	5·4 W	4·9 N	4·0 W	6·7 S	4·0 W	3·4 S	9·5 W	4·5 S	10·6 W	1·5 S	5·0 W	0·4 N	1·5 W	1·1 N	0·1 E	2·3 N	1·3 E
12 ..	3·3 N	0·8 W	4·3 N	1·1 E	1·8 N	4·5 W	1·1 N	3·7 W	6·5 N	7·3 W	9·6 S	4·8 W	4·3 S	12·6 W	4·0 S	12·2 W	3·8 S	2·3 W	2·8 N	3·4 W	3·3 N	0·7 W	3·3 N	0·9 E
13 ..	3·4 N	0·8 W	4·1 N	2·4 E	6·7 N	5·5 W	0·3 S	4·3 W	3·7 N	6·0 W	8·0 S	8·1 W	1·0 S	14·5 W	4·3 S	11·4 W	3·4 S	2·3 W	3·2 N	4·9 W	3·2 N	0·9 W	5·4 N	0·4 E
14 ..	6·2 N	1·9 W	4·4 N	0·5 E	4·8 N	2·5 W	2·4 N	5·4 W	1·7 N	5·0 W	7·3 S	5·6 W	3·7 S	13·5 W	4·8 S	11·9 W	3·4 S	2·8 W	3·7 N	5·2 W	4·2 N	0·7 W	3·7 N	2·7 E
15 ..	2·1 N	0·1 E	2·8 N	1·0 W	6·2 N	0·8 W	3·7 N	5·4 W	1·5 S	4·5 W	3·7 S	6·9 W	4·5 S	10·7 W	6·0 S	14·6 W	4·1 S	3·0 W	4·0 N	5·8 W	2·0 N	0·6 E	3·4 N	0·4 E
16 ..	1·7 S	0·9 E	3·5 N	0·8 W	3·3 S	1·9 W	3·8 N	5·9 W	1·5 S	3·7 W	3·6 S	11·1 W	4·5 S	11·1 W	4·9 S	11·5 W	1·6 S	3·8 W	4·5 N	2·8 W	0·4 N	0·2 E	2·4 N	0·7 E
17 ..	3·1 N	0·7 W	4·2 N	3·6 W	8·0 S	1·4 W	2·0 N	5·9 W	1·7 S	3·3 W	3·8 S	9·6 W	4·7 S	11·3 W	5·4 S	8·9 W	0·2 N	3·9 W	2·6 N	0·5 W	0·7 S	1·2 E	1·8 N	0·5 E
18 ..	4·5 N	1·9 W	6·4 N	3·3 W	6·5 N	5·0 W	0·1 N	4·8 W	2·5 S	3·4 W	4·3 S	10·4 W	4·3 S	10·9 W	6·2 S	8·0 W	0·7 N	4·9 W	1·5 S	1·1 W	1·0 N	0·3 W	1·2 N	1·1 E
19 ..	2·3 N	1·0 W	6·5 N	2·8 W	7·7 N	3·9 W	0·2 N	4·4 W	2·3 S	2·6 W	3·4 S	8·1 W	3·5 S	10·4 W	5·8 S	7·0 W	0·7 N	3·6 W	0·0	1·5 W	5·1 N	3·0 W	3·4 N	0·8 E
20 ..	3·4 N	0·1 E	4·3 N	2·9 W	9·9 N	4·9 W	4·8 N	6·3 W	1·6 S	4·0 W	3·2 S	9·3 W	4·3 S	10·3 W	5·8 S	5·8 W	1·6 N	5·1 W	2·0 N	0·1 E	6·5 N	1·9 W	4·8 N	0·5 E
21 ..	1·7 N	1·0 E	3·7 N	3·1 W	1·9 N	1·0 W	5·4 N	5·3 W	1·0 S	3·7 W	3·1 S	10·0 W	4·6 S	10·0 W	3·8 S	8·3 W	1·0 N	3·4 W	2·1 N	0·7 E	5·1 N	1·5 W	0·2 N	0·8 E
22 ..	1·6 N	0·7 E	4·5 N	2·4 W	3·5 N	1·5 W	6·5 N	6·7 W	1·5 N	4·8 W	3·5 S	7·7 W	4·9 S	6·9 W	4·3 S	11·2 W	0·0	2·1 W	1·0 N	0·6 E	4·5 N	1·3 W	1·8 N	0·7 E
23 ..	2·8 N	0·3 W	5·5 N	2·3 W	5·2 N	2·8 W	6·1 N	7·5 W	1·9 N	5·6 W	1·9 S	6·8 W	4·4 S	10·3 W	5·1 S	11·4 W	1·8 N	2·1 W	0·9 N	0·5 W	4·3 N	5·3 E	3·0 N	1·1 E
24 ..	3·5 N	2·4 W	0·4 N	1·1 W	8·9 N	5·4 W	5·1 N	5·1 W	0·3 N	5·6 W	2·9 S	8·4 W	2·9 S	11·1 W	4·7 S	7·8 W	2·1 N	7·0 W	1·5 S	1·3 E	6·0 N	0·9 E	4·0 N	3·1 E
25 ..	2·1 N	2·6 W	2·0 S	1·1 W	7·0 N	6·6 W	4·5 N	4·6 W	2·9 S	3·5 W	3·9 S	6·8 W	3·7 S	7·5 W	2·4 S	7·2 W	2·9 S	8·1 W	1·5 S	1·0 E	2·9 N	1·5 E	4·2 N	4·1 E
26 ..	3·2 N	2·1 W	3·1 N	2·1 W	2·9 N	4·8 W	5·3 N	5·1 W	1·6 S	3·9 W	2·1 S	9·6 W	4·9 S	3·3 W	0·6 S	3·2 W	1·3 N	7·3 W	0·1 N	0·5 W	1·2 N	0·2 W	4·3 N	1·7 E
27 ..	6·8 N	2·9 W	4·5 N	4·0 W	6·2 N	5·9 W	2·4 N	5·2 W	1·8 N	7·5 W	0·9 N	8·9 W	6·4 S	0·1 W	1·2 S	5·4 W	0·5 S	7·5 W	2·6 N	1·8 W	0·1 S	1·3 E	2·9 N	2·9 E
28 ..	5·6 N	0·5 W	5·4 N	3·3 W	6·5 N	4·4 W	1·6 N	4·5 W	1·9 N	8·6 W	3·2 N	7·7 W	1·3 S	5·2 W	0·3 N	8·8 W	0·1 S	5·9 W	4·5 N	0·5 W	1·8 S	0·1 W	1·0 N	3·4 E
29 ..	6·5 N	2·3 W			6·5 N	4·5 W	2·9 N	4·0 W	0·4 N	8·9 W	2·6 N	7·0 W	0·0	9·5 W	0·4 N	8·9 W	0·7 S	3·9 W	3·1 N	1·3 W	0·4 S	1·9 E	2·6 N	1·0 E
30 ..	3·4 N	3·7 W			0·9 S	3·2 W	1·1 S	3·4 W	0·4 N	7·5 W	0·8 N	8·9 W	1·1 N	6·2 W	0·7 S	8·8 W	0·7 N	2·9 W	3·4 N	2·0 W	0·9 N	0·9 W	2·2 N	0·7 W
31 ..	6·7 N	2·0 W			3·3 N	4·1 W			0·7 N	6·7 W			1·5 S	10·5 W	2·9 S	9·4 W			2·6 N	0·7 E			2·7 N	0·7 W
Monthly Mean ..	3·5 N	0·9 W	4·2 N	1·4 W	3·5 N	3·5 W	3·6 N	5·1 W	0·3 N	4·9 W	2·5 S	6·4 W	2·6 S	7·9 W	3·2 S	9·9 W	0·7 S	6·1 W	1·7 N	1·9 W	2·2 N	0·2 E	2·9 N	0·8 E
Annual Variation.	2·4 N	3·0 E	3·1 N	2·5 E	2·4 N	0·4 E	2·5 N	1·2 W	0·8 S	1·0 W	3·6 S	2·5 W	3·7 S	4·0 W	4·3 S	6·0 W	1·8 S	2·2 W	0·6 N	2·0 E	1·1 N	4·1 E	1·8 N	4·7 E

The Velocities of the Mean Components for the year are 1·1 N and 3·9 W.

TABLE VId.—*Showing the mean diurnal inequality of the velocity of the North or South and East or West Components of the wind for each month of the year* 1911, *and for the whole year.*

In miles per hour.

1911.	Month.																								Year.	
	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.			
Bombay Civil Time Hourly Intervals.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.
0 to 1	1·1 S	2·1 E	0·6 S	1·2 E	0·4 S	1·0 E	1·1 N	1·0 E	0·2 N	1·5 E	0·7 S	0·5 E	1·2 S	0·1 E	0·7 S	0·4 E	0·4 S	0·2 E	0·3 S	0·7 E	2·1 S	3·1 E	1·1 S	1·6 E	0·6 S	1·1 E
1 „ 2	1·2 S	2·5 E	0·3 S	1·2 E	0·6 S	1·6 E	0·8 N	1·7 E	0·1 N	1·5 E	0·3 S	0·2 E	0·8 S	0·9 W	0·6 S	0·1 E	0·4 S	0·1 E	0·6 S	1·2 E	1·2 S	2·5 E	1·4 S	2·4 E	0·5 S	1·2 E
2 „ 3	1·3 S	2·5 E	0·2 S	2·0 E	0·0	2·1 E	0·2 N	2·8 E	0·0	2·1 E	0·2 N	0·3 W	0·5 S	0·5 W	0·4 S	0·1 E	0·3 S	0·1 W	0·7 S	1·7 E	1·4 S	2·9 E	0·4 S	2·2 E	0·4 S	1·5 E
3 „ 4	0·7 S	2·6 E	0·1 S	3·0 E	0·7 S	3·2 E	0·1 N	4·1 E	0·1 N	2·0 E	1·0 N	0·3 W	0·2 S	0·0	0·1 N	0·0	0·1 S	0·3 E	0·5 S	2·6 E	1·4 S	2·9 E	0·0	2·3 E	0·2 S	1·9 E
4 „ 5	0·7 S	3·5 E	0·0	3·7 E	0·7 S	3·5 E	0·8 S	4·7 E	0·1 S	2·2 E	0·6 N	0·7 W	0·5 S	0·2 E	0·2 N	0·2 W	0·1 S	0·1 E	0·5 S	3·3 E	0·4 S	3·2 E	0·4 N	3·5 E	0·2 S	2·2 E
5 „ 6	1·3 S	3·9 E	0·6 S	4·0 E	1·3 S	4·1 E	1·2 S	5·5 E	0·4 S	3·2 E	0·1 N	0·1 E	0·1 S	0·3 E	0·7 N	0·2 W	0·1 N	1·0 E	0·8 S	4·0 E	0·4 S	3·0 E	0·1 S	4·4 E	0·4 S	2·8 E
6 „ 7	1·6 S	4·1 E	1·1 S	4·3 E	1·8 S	5·3 E	1·4 S	5·6 E	0·2 S	3·6 E	0·0	1·0 E	0·4 S	0·1 E	0·1 N	0·6 W	0·4 S	1·5 E	0·9 S	4·5 E	0·7 S	3·4 E	0·3 S	4·8 E	0·7 S	3·1 E
7 „ 8	2·0 S	4·8 E	1·2 S	4·9 E	1·8 S	5·4 E	1·3 S	4·8 E	0·1 S	3·0 E	0·0	1·2 E	0·2 S	0·6 E	0·2 N	0·4 W	0·3 S	2·1 E	1·2 S	5·1 E	1·2 S	4·3 E	0·7 S	5·4 E	0·8 S	3·4 E
8 „ 9	2·0 S	4·9 E	1·2 S	5·9 E	1·7 S	5·5 E	0·8 S	2·8 E	0·6 S	2·2 E	0·1 S	0·7 E	0·3 S	0·4 E	0·1 N	0·1 W	0·4 S	1·7 E	1·1 S	4·9 E	1·0 S	4·4 E	1·5 S	6·3 E	0·9 S	3·3 E
9 „ 10	1·5 S	4·3 E	1·8 S	5·5 E	1·2 S	3·8 E	1·1 S	1·2 E	0·6 S	1·2 E	0·1 S	0·2 E	0·0	0·3 W	0·3 N	0·0	0·2 S	0·7 E	0·9 S	3·9 E	0·9 S	4·5 E	1·8 S	5·5 E	0·8 S	2·5 E
10 „ 11	1·0 S	2·6 E	2·1 S	3·5 E	1·0 S	1·2 E	1·0 S	0·7 W	0·7 S	0·4 E	0·4 S	0· E	0·5 N	0·7 E	0·1 N	0·4 E	0·6 S	0·5 E	0·9 S	1·7 E	0·9 S	3·2 E	1·8 S	4·0 E	0·8 S	1·5 E
11 „ 12	0·8 S	0·7 W	1·4 S	0·4 W	0·0	2·6 W	0·7 S	1·9 W	1·2 S	0·8 W	0·1 S	0·3 W	0·1 S	0·7 E	0·5 S	0·2 W	0·3 S	0·6 W	0·4 S	1·0 W	1·2 S	0·1 W	1·6 S	2·1 E	0·7 S	0·5 W
12 „ 13	0·1 S	2·8 W	0·9 S	2·9 W	0·4 N	3·7 W	0·1 N	3·4 W	0·8 S	2·3 W	0·4 N	0·9 W	0·4 N	0·2 W	0·4 S	0·4 W	0·2 N	0·9 W	0·2 S	3·3 W	0·6 S	3·1 W	1·8 S	0·5 W	0·3 S	2·0 W
13 „ 14	0·2 N	4·5 W	0·7 S	5·2 W	0·6 N	5·0 W	0·7 N	4·5 W	0·7 S	3·0 W	0·5 N	1·5 W	1·0 N	0·8 W	0·1 S	0·4 W	0·4 N	1·5 W	0·4 N	4·8 W	0·3 N	4·9 W	1·4 S	3·2 W	0·1 N	3·3 W
14 „ 15	1·0 N	5·5 W	0·1 N	6·3 W	1·2 N	5·6 W	0·9 N	5·4 W	0·4 S	3·8 W	0·1 N	1·3 W	0·4 N	1·0 W	0·1 S	0·9 W	0·6 N	1·8 W	0·7 N	5·3 W	0·7 N	5·9 W	0·9 S	6·1 W	0·4 N	4·1 W
15 „ 16	1·6 N	5·9 W	1·2 N	6·7 W	1·7 N	5·9 W	1·1 N	5·5 W	0·0	4·1 W	0·9 N	1·3 W	0·7 N	1·2 W	0·0	0·8 W	0·4 N	1·5 W	1·1 N	5·6 W	0·7 N	6·1 W	0·1 S	6·8 W	0·8 N	4·3 W
16 „ 17	1·9 N	5·5 W	1·7 N	5·9 W	2·0 N	5·3 W	0·7 N	4·5 W	0·3 N	3·6 W	0·3 N	1·6 W	0·5 N	0·8 W	0·1 N	0·8 W	0·7 N	1·3 W	1·6 N	5·1 W	1·2 N	5·6 W	0·4 N	6·8 W	0·9 N	3·9 W
17 „ 18	2·1 N	5·1 W	3·2 N	5·3 W	1·8 N	4·6 W	0·7 N	3·7 W	0·6 N	3·1 W	0·2 N	1·5 W	1·0 N	0·7 W	0·1 N	0·6 W	0·7 N	1·2 W	1·4 N	3·9 W	1·9 N	4·8 W	1·4 N	3·5 W	1·3 N	3·4 W
18 „ 19	2·9 N	4·5 W	3·3 N	4·0 W	1·8 N	3·2 W	0·1 N	2·6 W	1·0 N	2·1 W	0·2 N	0·3 W	0·2 N	0·0	0·1 N	0·8 E	0·3 N	0·7 W	1·5 N	2·9 W	2·3 N	4·3 W	3·2 N	5·5 W	1·4 N	2·4 W
19 „ 20	3·1 N	3·4 W	2·9 N	3·2 W	1·8 N	2·3 W	0·2 N	1·5 W	0·7 N	0·8 W	0·1 S	0·4 E	0·1 N	0·1 E	0·4 N	0·2 E	0·7 N	0·3 W	1·8 N	1·5 W	2·6 N	3·0 W	3·7 N	4·8 W	1·5 N	1·7 W
20 „ 21	2·1 N	1·5 W	1·6 N	1·5 W	0·7 N	1·0 W	0·1 S	0·7 W	0·7 N	0·2 W	0·1 N	0·5 E	0·1 S	0·4 E	0·2 S	1·0 E	0·4 N	0·4 E	0·7 N	0·7 W	2·3 N	1·8 W	3·1 N	3·2 W	0·9 N	0·7 W
21 „ 22	1·2 N	0·7 W	0·3 S	0·3 E	0·4 N	0·7 E	0·5 N	0·2 W	0·8 N	0·2 E	0·5 S	1·6 E	0·2 S	0·8 E	0·0	1·1 E	0·1 N	0·4 E	0·1 S	0·0	1·4 N	0·2 W	2·1 N	1·5 W	0·4 N	0·2 E
22 „ 23	0·3 N	0·5 E	0·4 S	1·5 E	0·1 S	1·0 E	0·6 N	0·3 W	0·7 N	0·5 E	1·0 S	1·5 E	0·5 S	0·9 E	0·4 S	1·2 E	0·0	0·4 E	0·1 N	0·3 E	0·1 S	1·2 E	1·1 N	0·1 W	0·0	0·7 E
23 „ 24	0·6 S	1·2 E	0·8 S	1·0 E	0·8 S	1·2 E	1·0 N	0·7 E	0·7 N	0·7 E	0·9 S	1·0 E	0·5 S	1·5 E	0·1 S	0·9 E	0·1 N	0·6 E	0·4 S	0·6 E	1·0 S	1·8 E	0·1 N	0·4 E	0·3 S	1·0 E

Aggregate and Mean Velocities and Relative Frequency of Different Winds, 1911.

Table VIe.—*Showing for the year* 1911 *the sums of the Velocities, and the Mean Velocities, in miles per hour, of the Winds which blew in each Month, from each of the sixteen Principal Directions and also the number of hourly Observations which those sums comprise; the latter numbers indicating the Relative Frequency of the same Wind (as to direction) in the several Months, and of different Winds during the same Month.*

1911.	N.			N. N. E.			N. E.			E. N. E.			E.			E. S. E.			S. E.			S. S. E.		
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.
January ..	333	64	5·2	357	80	4·5	117	31	3·8	455	95	4·8	188	39	4·8	272	44	6·2	68	11	6·2	14	3	4·7
February ..	343	65	5·3	291	56	5·2	196	45	4·4	609	103	5·9	128	23	5·6	0	0	0·0	18	4	4·5	32	8	4·0
March ..	239	38	6·3	204	49	4·2	89	20	4·4	184	33	5·6	67	17	3·9	111	20	5·5	24	5	4·8	28	12	2·3
April ..	76	16	4·7	190	53	3·6	46	15	3·1	4	1	4·0	12	3	4·0	5	2	2·5	4	2	2·0	10	3	3·3
May ..	2	1	2·0	20	7	2·9	24	9	2·7	0	0	0·0	0	0	0·0	31	6	5·2	4	1	4·0	11	2	5·5
June ..	0	0	0·0	2	1	2·0	8	2	4·0	35	6	5·8	5	1	5·0	71	6	11·8	59	6	9·8	259	26	10·0
July ..	4	1	4·0	1	2	0·5	10	2	5·0	8	2	4·0	16	3	5·3	42	5	8·4	43	4	10·7	101	11	9·2
August ..	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0
September ..	0	0	0·0	6	2	3·0	2	1	2·0	19	6	3·2	4	1	4·0	35	9	3·9	39	9	4·3	5	1	5·0
October ..	24	7	3·4	95	26	3·7	112	32	3·5	304	53	5·7	101	21	4·8	245	41	6·0	170	34	5·0	35	15	2·3
November ..	194	45	4·3	239	54	4·4	292	61	4·8	496	96	5·2	247	50	4·9	444	97	4·6	54	13	4·2	15	4	3·7
December ..	190	43	4·4	342	88	3·9	315	63	5·0	1,100	172	6·4	286	53	5·4	301	48	6·3	4	1	4·0	5	1	5·0
Year ..	1,405	280	5·0	1,747	418	4·2	1,211	281	4·3	3,214	567	5·7	1,054	211	5·0	1,557	278	5·6	487	90	5·4	515	86	6·0

1911.	S.			S. S. W.			S. W.			W. S. W.			W.			W. N. W.			N. W.			N. N. W.			Number of Observations.	
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Calm.	Variable.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.		
January ..	14	2	7·0	5	1	5·0	0	0	0·0	7	2	3·5	69	23	3·0	646	111	5·8	1,115	131	8·5	877	105	8·4	2	0
February ..	0	0	0·0	21	4	5·2	4	1	4·0	50	12	4·2	57	15	3·8	620	77	8·1	1,209	138	8·8	900	121	7·4	0	0
March ..	167	19	8·8	122	26	4·7	41	12	3·4	136	31	4·4	200	35	5·7	1,091	136	8·0	1,912	188	10·2	802	103	7·8	0	0
April ..	5	1	5·0	53	11	4·8	28	7	4·0	150	37	4·1	495	94	5·3	2,086	234	8·9	1,556	158	9·8	593	81	7·3	2	0
May ..	78	15	5·2	180	41	4·4	191	46	4·2	869	170	5·1	1,214	197	6·2	1,251	166	7·5	358	50	7·2	198	26	7·6	7	0
June ..	230	24	9·6	520	57	9·1	416	54	7·7	2,639	287	9·2	899	109	8·2	1,055	128	8·2	80	11	7·3	10	2	5·0	0	0
July ..	65	8	8·1	268	33	8·1	258	38	6·8	4,156	399	10·4	1,481	145	10·2	323	56	5·8	114	21	5·4	81	13	6·2	0	1
August ..	6	1	6·0	58	8	7·2	730	84	8·7	4,994	450	11·1	1,950	167	11·7	317	34	9·3	0	0	0·0	0	0	0·0	0	0
September ..	18	4	4·5	255	52	4·9	169	39	4·3	962	134	7·2	2,408	300	8·0	1,007	154	6·5	22	6	3·7	6	2	3·0	0	0
October ..	70	16	4·4	23	9	2·6	5	2	2·5	87	25	3·5	255	63	4·0	1,366	212	6·4	784	135	5·8	262	50	5·2	3	0
November ..	8	2	4·0	15	5	3·0	29	11	2·6	106	30	3·5	144	26	5·5	467	76	6·1	648	82	7·9	454	68	6·7	0	0
December ..	1	1	1·0	0	0	0·0	0	0	0·0	12	3	4·0	187	35	5·3	594	91	6·5	524	70	7·5	572	75	7·6	0	0
Year. ..	662	93	7·1	1,520	247	6·2	1,871	294	6·4	14,168	1,580	9·0	9,359	1,209	7·7	10,823	1,475	7·3	8,322	990	8·4	4,755	646	7·4	14	1

Velocity of Wind, 1911.

DINES' ANEMOGRAPH.

TABLE VIf.—*Mean Velocity of the Wind in miles per hour for each day of Bombay Civil Time; also the mean Monthly Velocity and its variation from the mean of the year.*

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	4·8	10·6	6·7	11·0	4·6	7·1	5·5	6·8	9·3	3·8	5·3	4·7
2 ..	3·2	7·2	6·3	7·8	3·5	8·5	4·5	9·6	10·0	3·3	4·9	5·7
3 ..	5·1	6·0	5·5	7·2	3·6	6·9	3·4	11·4	8·6	5·5	4·2	3·7
4 ..	5·6	5·7	6·1	6·7	4·0	4·9	4·1	11·7	8·0	6·4	4·5	5·4
5 ..	9·2	6·2	6·2	5·0	7·5	4·0	4·1	9·1	8·9	5·8	5·5	5·7
6 ..	7·1	5·6	6·7	5·9	6·2	4·4	4·0	8·3	6·9	4·2	4·2	5·1
7 ..	5·7	7·0	5·1	6·7	4·6	4·5	5·7	10·1	8·1	3·0	3·7	5·0
8 ..	6·3	6·7	5·2	10·2	3·5	5·5	7·6	11·0	8·1	3·2	5·7	5·0
9 ..	5·1	7·0	4·9	8·0	5·1	10·9	8·7	11·5	9·6	4·0	5·1	5·5
10 ..	4·5	6·1	3·5	6·1	7·5	8·9	8·6	7·1	8·8	3·7	4·3	4·4
11 ..	5·2	6·6	4·5	6·5	6·5	9·5	8·7	9·2	4·8	4·4	4·2	6·0
12 ..	5·2	6·7	5·0	4·0	10·0	10·1	10·9	10·7	4·6	5·2	5·3	6·0
13 ..	4·7	7·5	8·9	4·0	7·6	10·3	12·1	9·8	4·2	5·7	5·2	6·0
14 ..	7·4	6·7	7·7	5·4	5·2	8·4	11·6	10·3	4·2	6·2	5·7	7·1
15 ..	3·7	4·0	7·9	6·2	4·9	6·6	9·3	12·9	5·0	6·7	4·5	5·2
16 ..	4·8	5·5	5·6	6·9	4·1	9·5	9·3	10·1	4·3	5·9	4·1	6·7
17 ..	5·6	6·4	8·5	6·0	3·5	8·5	9·7	8·7	3·6	6·1	4·2	4·5
18 ..	5·9	7·7	8·2	4·0	4·0	9·4	9·2	8·7	4·6	4·0	4·1	4·4
19 ..	4·3	7·5	9·0	4·0	3·6	7·3	8·6	8·0	4·7	3·8	6·1	5·5
20 ..	5·1	5·7	10·9	8·0	3·7	7·7	8·8	6·8	5·0	5·3	7·1	6·0
21 ..	6·1	5·2	5·6	7·6	3·5	8·5	8·8	7·1	4·9	5·0	6·4	4·1
22 ..	4·8	5·9	6·2	9·2	4·8	6·6	7·3	9·5	3·7	4·6	6·2	4·6
23 ..	5·0	6·9	6·7	9·5	5·8	5·5	8·9	10·0	4·2	4·5	6·8	5·0
24 ..	5·9	4·2	10·3	7·9	5·2	7·0	9·4	7·5	6·7	4·2	6·6	6·5
25 ..	4·4	3·0	9·4	7·3	4·2	6·6	6·7	6·2	7·9	4·9	4·5	7·7
26 ..	7·5	5·1	6·3	8·1	3·5	8·1	5·8	3·1	6·7	4·4	2·5	5·7
27 ..	8·4	6·5	8·8	7·5	6·7	7·5	7·3	5·2	6·5	6·0	3·1	6·2
28 ..	6·7	6·4	8·6	6·2	7·7	7·2	3·8	8·5	5·0	7·3	3·2	5·4
29 ..	7·7		8·9	5·2	7·9	6·4	7·6	8·2	3·5	5·1	4·3	4·6
30 ..	6·2		3·3	3·2	6·6	7·4	5·9	8·3	3·5	5·5	4·8	4·0
31 ..	9·3		7·0		6·1		8·5	8·6		4·5		4·3
Monthly Mean.	5·8	6·3	6·9	6·7	5·3	7·5	7·6	8·9	6·1	4·9	4·9	5·3
Annual Variation.	− 0·5	0·0	+ 0·6	+ 0·4	− 1·0	+ 1·2	+ 1·3	+ 2·6	− 0·2	− 1·4	− 1·4	− 1·0

TABLE VIg.—*Showing the mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year 1911 and for the whole year.*

1911. Bombay Civil Time Hourly intervals.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1..	− 1·8	− 2·2	− 1·8	− 0·5	− 1·0	− 0·5	0·0	− 0·4	− 0·4	− 1·2	− 0·4	− 2·5	− 1·1
1 „ 2..	− 1·8	− 1·7	− 1·5	− 0·8	− 1·0	− 0·2	+ 0·4	− 0·4	− 0·3	− 1·3	− 1·1	− 2·0	− 1·0
2 „ 3..	− 1·1	− 1·0	− 1·6	− 1·6	− 1·5	− 0·4	0·0	− 0·2	− 0·4	− 1·3	− 1·0	− 1·5	− 1·0
3 „ 4..	− 0·9	− 0·8	− 2·2	− 2·4	− 1·8	− 0·4	+ 0·1	− 0·2	− 0·4	− 1·2	− 0·9	− 0·9	− 1·0
4 „ 5..	− 0·5	− 1·0	− 2·2	− 3·3	− 1·9	− 0·2	+ 0·5	− 0·4	− 0·4	− 1·4	− 0·3	− 0·4	− 1·0
5 „ 6..	− 0·8	− 1·4	− 2·1	− 3·8	− 2·1	− 0·3	− 0·1	0·0	− 0·6	− 1·0	− 1·0	+ 0·3	− 1·1
6 „ 7..	− 0·9	− 1·5	− 2·1	− 3·9	− 2·0	+ 0·2	0·0	+ 0·1	− 0·5	− 0·5	− 0·5	+ 0·8	− 0·9
7 „ 8..	− 1·0	− 1·1	− 2·0	− 3·2	− 1·9	+ 0·5	− 0·5	+ 0·4	− 0·6	+ 0·3	− 0·2	+ 1·0	− 0·7
8 „ 9..	− 0·5	− 0·4	− 1·6	− 2·0	− 1·4	+ 0·6	− 0·1	− 0·1	− 0·3	+ 0·7	+ 0·2	+ 1·6	− 0·3
9 „ 10..	− 0·2	− 0·8	− 1·6	− 1·3	− 0·7	+ 0·3	+ 0·5	+ 0·1	− 0·3	+ 0·3	+ 0·6	+ 1·2	− 0·2
10 „ 11..	− 0·7	− 2·1	− 0·9	− 0·3	0·0	+ 0·7	+ 0·2	+ 0·1	− 0·6	− 0·6	− 0·8	0·0	− 0·4
11 „ 12..	− 0·6	− 0·9	+ 0·8	+ 0·8	+ 0·7	+ 0·2	+ 0·1	+ 0·4	+ 0·5	0·0	− 1·0	− 0·8	0·0
12 „ 13..	+ 0·1	+ 0·6	+ 1·8	+ 2·1	+ 1·6	− 0·1	+ 0·3	+ 0·6	+ 1·1	+ 0·7	0·0	− 0·8	+ 0·7
13 „ 14..	+ 0·9	+ 1·7	+ 2·7	+ 3·3	+ 2·3	+ 0·3	+ 0·4	+ 0·5	+ 1·3	+ 1·9	+ 1·0	− 0·2	+ 1·3
14 „ 15..	+ 1·9	+ 2·5	+ 3·6	+ 4·3	+ 3·0	+ 0·6	+ 0·8	+ 0·8	+ 1·5	+ 2·3	+ 1·7	+ 0·5	+ 2·0
15 „ 16..	+ 2·5	+ 3·3	+ 3·9	+ 4·3	+ 3·1	+ 0·6	+ 0·6	+ 0·7	+ 1·4	+ 2·7	+ 2·1	+ 1·3	+ 2·2
16 „ 17..	+ 2·5	+ 3·3	+ 3·5	+ 3·3	+ 2·8	+ 0·9	+ 0·2	+ 0·8	+ 1·1	+ 2·3	+ 2·0	+ 1·2	+ 2·0
17 „ 18..	+ 2·4	+ 3·3	+ 2·9	+ 2·6	+ 2·3	+ 0·4	+ 0·2	+ 0·5	+ 0·9	+ 1·5	+ 1·6	+ 1·6	+ 1·7
18 „ 19..	+ 2·8	+ 2·9	+ 2·3	+ 1·6	+ 1·6	0·0	− 0·3	− 0·4	+ 0·3	+ 0·9	+ 1·3	+ 2·0	+ 1·2
19 „ 20..	+ 2·2	+ 2·0	+ 1·8	+ 0·8	+ 0·2	− 0·5	− 0·7	− 0·5	− 0·1	0·0	+ 0·8	+ 2·2	+ 0·7
20 „ 21..	+ 0·4	+ 0·2	+ 0·5	0·0	− 0·2	− 1·0	− 0·8	− 0·8	− 0·5	− 0·9	0·0	+ 0·8	− 0·2
21 „ 22..	− 0·9	− 1·6	− 1·1	+ 0·2	− 0·4	− 1·0	− 1·1	− 1·0	− 0·6	− 1·4	− 1·3	− 0·6	− 0·9
22 „ 23..	− 1·6	− 2·1	− 1·6	+ 0·1	− 0·6	− 1·0	− 0·7	− 1·0	− 0·5	− 1·3	− 1·7	− 1·6	− 1·1
23 „ 24..	− 1·9	− 2·0	− 1·8	− 0·1	− 0·7	− 0·7	− 0·4	− 0·6	− 0·6	− 1·1	− 1·2	− 2·0	− 1·1
Range. ..	4·7	5·5	6·1	8·2	5·2	1·9	1·9	1·8	2·1	4·1	3·8	4·7	3·3

	Miles.
The mean velocity for June to August ...	8·0
The mean velocity for September to May ..	5·8
The mean velocity for the year ..	6·3

Temperature of the Ground, 1911.

TABLE VIIa.—*Showing for each month the mean Temperature of the Ground in the thermometer shed and its Annual Variation at the respective depths of* 1, 9, 20, 60 and 132 *inches below the surface.*

Depth.	1 inch.		9 inches.		20 inches.		60 inches.		132 inches.	
Month.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.
	°	°	°	°	°	°	°	°	°	°
January ..	77·0	−5·0	78·4	−3·9	82·0	−2·6	83·5	−1·5	83·6	−0·5
February ..	76·9	−5·1	77·6	−4·7	80·8	−3·8	82·9	−2·1	83·2	−0·9
March ..	80·2	−1·8	80·4	−1·9	82·8	−1·8	83·1	−1·9	83·3	−0·8
April ..	82·9	+0·9	83·0	+0·7	84·7	+0·1	84·1	−0·9	83·3	−0·8
May ..	86·8	+4·8	86·2	+3·9	87·5	+2·9	85·8	+0·8	83·6	−0·5
June ..	85·2	+3·2	85·9	+3·6	87·9	+3·3	87·1	+2·1	84·2	+0·1
July ..	83·6	+1·6	84·3	+2·0	86·7	+2·1	86·8	+1·8	85·0	+0·9
August ..	81·6	−0·4	82·4	+0·1	84·8	+0·2	85·8	+0·8	84·8	+0·7
September	82·5	+0·5	82·3	0·0	84·2	−0·4	85·0	0·0	84·5	+0·4
October ..	84·0	+2·0	83·4	+1·1	85·1	+0·5	85·2	+0·2	84·5	+0·4
November..	82·5	+0·5	82·4	+0·1	84·6	0·0	85·4	+0·4	84·5	+0·4
December	81·4	−0·6	81·4	−0·9	83·8	−0·8	85·1	+0·1	84·4	+0·3
Year ..	82·0		82·3		84·6		85·0		84·1	

TABLE VIIb.—*Showing for each of the five observation hours and for the mean of the day, the Temperature of the Ground exposed to the direct rays of the sun at the depths of* 1 *in. and* 8 *inches below the surface.*

Depth from surface.	1 inch.						8 inches.					
Month.	Observation Hours.					Mean of five observation hours.	Observation Hours.					Mean of five observation hours.
	6	10	14	16	22		6	10	14	16	22	
	°	°	°	°	°	°	°	°	°	°	°	°
January ..	73·1	85·2	109·2	97·8	80·1	89·1	78·7	78·0	78·7	79·3	80·1	79·0
February ..	72·7	81·7	110·9	107·4	79·9	90·5	79·4	78·7	79·3	80·4	81·2	79·8
March ..	78·4	86·2	115·3	112·2	84·4	95·3	86·5	85·5	86·7	88·2	88·8	87·2
April ..	83·4	90·8	114·7	112·7	88·5	98·0	93·3	92·2	93·9	95·5	96·6	94·3
May ..	88·7	96·4	116·3	112·9	94·7	101·8	99·2	98·4	100·1	101·7	102·9	100·5
June ..	84·1	89·0	97·5	95·8	86·8	90·6	91·5	90·6	92·4	93·6	94·2	92·4
July ..	81·5	85·7	90·6	89·7	83·9	86·3	87·7	87·0	88·6	89·3	89·4	88·4
August ..	78·7	82·7	88·9	87·5	80·6	83·7	83·0	82·6	83·7	84·7	84·8	83·8
September	81·3	86·5	98·6	95·5	83·6	89·1	85·6	85·1	86·8	87·9	88·0	86·7
October ..	84·3	96·2	118·6	110·9	88·8	99·8	89·4	88·8	90·3	91·4	91·6	90·3
November..	80·6	94·9	114·9	104·4	86·3	96·2	85·8	85·1	85·9	86·7	87·3	86·2
December	77·9	91·4	114·7	97·0	83·3	92·9	82·8	82·1	82·9	83·6	84·2	83·1
Year .	80·4	88·9	107·5	102·0	85·1	92·8	86·9	86·2	87·4	88·5	89·1	87·6

Maxima and Minima of different Meteorological Elements, 1911.

TABLE VIII.—*In which are collected the individual observations in each month of the year which showed the greatest and the least values of the following elements, viz., Height of Barometer (corrected for Temperature), Temperature of Air, Pressure of Vapour and Additional Capacity of Air, and Ground Temperatures, 1 inch and 8 inches below the surface (exposed to solar rays).*

1911.	Height of Barometer.			Temperature of Air.			Pressure of Vapour.			Additional Capacity.			Ground Thermometer 1 inch deep.			Ground Thermometer 8 inches deep.		
Month.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.
	In.	In.	In.	°	°	°	In.	In.	In.	In.	In.	In.	°	°	°	°	°	°
January	30·108	29·756	0·352	88·9	62·7	26·2	0·868	0·315	0·553	0·822	0·051	0·771	117·0	68·0	49·0	82·0	75·7	6·3
February	·096	·818	·278	90·1	59·3	30·8	·887	·161	·726	1·058	·052	1·006	116·0	63·5	52·5	85·7	73·7	12·0
March	·020	·749	·271	87·9	69·8	18·1	·892	·354	·538	0·904	·067	0·837	121·0	74·0	47·0	93·2	82·3	10·9
April	·020	·685	·335	88·6	73·4	15·2	·965	·562	·403	·680	·080	·600	118·0	80·5	37·5	98·9	89·3	9·6
May	29·924	·633	·291	91·4	78·6	12·8	1·027	·752	·275	·600	·115	·485	122·0	86·0	36·0	106·2	95·7	10·5
June	·850	·485	·365	90·5	76·8	13·7	·027	·793	·234	·446	·037	·409	121·0	77·4	43·6	106·7	79·3	27·4
July	·825	·561	·264	88·1	75·3	12·8	0·987	·774	·213	·398	·018	·380	99·0	76·0	23·0	98·2	79·8	18·4
August	·842	·614	·228	84·9	74·2	10·7	·955	·781	174	·280	·019	·261	97·5	74·5	23·0	87·8	78·9	8·9
September	·903	·673	·230	85·5	76·1	9·4	·970	·754	·216	·398	·054	·344	109·0	78·5	30·5	90·8	82 3	8·5
October	30·041	·722	·319	91·1	74·5	16·6	1·025	·597	·428	·808	·074	·734	125·0	79·5	45·5	93·5	85·8	7·7
November	·063	·689	·374	90·8	74·0	16·8	0·937	·531	·406	·801	·066	·735	124·5	78·0	46·5	89·6	83·7	5·9
December	·067	·808	·259	89·4	70·4	19·0	·923	·438	·485	·916	·072	·844	120·0	73·5	46·5	87·2	80·2	7·0
Year	30·108	29·485	0·623	91·4	59·3	32·1	1·027	0·161	0·866	1·058	0·018	1·040	125·0	63·5	61·5	106·7	73·7	33·0

Relative Humidity of the Air, 1911.

TABLE IXa.—*Daily and monthly means of Observations taken at 6, 10, 14, 16 and 22 hours daily.*

Complete Saturation=1·000.

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	0·747	**0·365**	0·703	0·691	0·750	**0·741**	0·762	0·889	0·860	0·779	0·663	**0·831**
2	·773	·457	·658	·743	·741	·744	**·755**	·852	·848	·742	·700	·770
3	·791	·618	·716	·727	·737	·768	·766	·820	**·886**	·759	·745	·744
4	·691	·637	·739	·726	·765	·815	·824	·902	·838	·807	·766	·698
5	·622	·635	·744	·745	·768	·864	·838	·934	·825	·810	·687	·698
6	·585	·672	·721	·746	·759	·833	·884	**·949**	·823	·815	·734	·663
7	·656	·596	·754	·786	·764	·786	·876	·887	·800	·818	·755	·650
8	·702	·710	·718	**·613**	·742	·809	·906	·847	·799	**·850**	·748	·704
9	·763	·692	·743	·731	·763	·839	·918	·830	·833	·808	·739	·750
10	·670	·609	·692	·738	·714	·862	**·919**	·830	·798	·797	·737	·725
11	·722	·643	·744	·760	·724	·907	·844	·834	·810	·783	·744	·696
12	·753	·594	·703	·739	·777	·908	·851	**·800**	·810	·767	·806	·676
13	·766	·574	·598	·696	**·802**	**·913**	·842	·830	·803	·789	·775	·668
14	·694	·642	·647	·770	·778	·862	·845	·817	·795	·790	·695	·552
15	·694	·699	·615	·784	·767	·862	·851	·821	·800	·812	·690	·658
16	·772	·735	·762	·775	·769	·889	·822	·846	·842	·840	·687	·643
17	**·821**	·692	**·803**	·696	·753	·840	·810	·835	·776	·770	·694	·662
18	·805	·714	·696	·699	·746	·832	·805	·832	·773	·786	·713	·657
19	·797	·653	·634	·725	·726	·839	·818	·858	·780	·823	·695	·690
20	·743	·784	**·530**	·730	·723	·819	·832	·831	**·746**	·783	**·353**	·603
21	·695	·802	·635	·783	·719	·816	·801	·833	·775	·761	·733	·671
22	·668	·719	·695	·771	·732	·795	·806	·851	·766	·742	·763	·673
23	·744	·655	·611	·789	·731	·772	·805	·819	·788	·753	·823	·699
24	·801	·763	·634	·782	·738	·747	·804	·816	·833	·768	·784	·541
25	·769	**·838**	·695	**·794**	·747	·789	·814	·830	·841	·739	·815	**·528**
26	·659	·747	·761	·679	·757	·794	·794	·864	·825	·721	**·848**	·660
27	·637	·737	·714	·717	·730	·794	·819	·822	·819	**·694**	·839	·599
28	**·530**	·750	·679	·731	**·714**	·766	·783	·824	·804	·694	·821	·654
29	·560		·648	·740	·730	·744	·823	·892	·801	·738	·764	·654
30	·706		·782	·768	·731	·774	·897	·937	·793	·766	·808	·728
31	·727		·763		·733		·888	·872		·722		·675
Monthly Mean.	0·712	**0·669**	0·695	0·739	0·746	0·817	0·832	**0·852**	0·810	0·775	0·747	0·672
Annual Variation.	− ·043	− ·086	− ·060	− ·016	− ·009	+ ·062	+ ·077	+ ·097	+ ·055	+ ·020	− ·008	− ·083

Annual mean .. .. ..0·755

Extent of cloudy Sky, 1911.

TABLE IXb.—*Daily and monthly means of Observations taken at 6, 10, 14, 16, and 22 hours daily, the whole sky being reckoned as 10·0.*

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	..	0·4	..	2·0	**3·0**	5·8	**10·0**	9·2	6·0	0·2	0·8
2	0·4	..	..	0·4	3·2	4·2	4·4	9·6	8·6	4·8	0·4	0·8
3	4·6	..	0·4	..	2·8	8·6	7·2	8·8	**9·6**	4·0	4·4	3·4
4	2·6	..	..	0·4	6·0	8·0	9·0	10·0	8·0	6·0	4·0	0·6
5	0·2	..	..	1·6	**6·6**	9·6	9·2	10·0	7·2	6·0	3·0	5·4
6	1·2	..	..	0·4	3·8	8·0	8·8	10·0	7·8	6·6	4·2	3·0
7	3·2	..	..	..	2·4	5·8	9·4	8·8	7·6	6·8	3·2	3·0
8	2·2	..	..	0·4	4·0	8·0	**10·0**	8·0	7·6	**7·4**	0·2	4·4
9	2·6	1·0	0·8	2·0	2·8	8·6	10·0	9·4	8·0	**4·4**	..	5·4
10	5·6	..	1·0	1·0	1·6	8·8	10·0	9·2	5 6	6·8	3·0	3·0
11	3·6	..	**6·8**	1·2	6·2	9·8	8·8	8·2	6 0	2·8	2·0	1·6
12	5·4	..	3·2	1·6	**1·4**	**10·0**	9·4	**5·8**	4·4	3·2	0·6	1·4
13	**6·6**	..	4·8	3·4	5·6	10·0	10·0	7·6	6·0	2·8	5·0	1·8
14	5·0	..	0·0	2·2	5·4	8·8	9·4	8·8	4·4	2·2	3·8	2·2
15	1·8	..	6·0	0·8	6·2	8·8	10·0	8·8	7·6	4·8	2·0	..
16	1·2	..	2·6	1·8	6·2	9·2	7·0	8·4	6·6	4·4	2·4	..
17	2·0	..	6·8	**4·6**	5·2	6·4	7·4	10·0	3·6	4·8	5·2	..
18	..	..	1·4	4·0	2·0	6·4	7·2	8·8	**2·8**	4·0	4·4	1·0
19	..	..	0·4	3·4	3·2	8·8	6·8	10·0	3·4	5·4	5·0	2·8
20	..	..	..	2·6	1·8	7·0	8·0	8·6	5·0	4·0	5·0	2·0
21	..	..	..	..	4·0	8·0	8·2	8·4	5·0	0·8	3·4	1·2
22	..	..	..	..	3·8	3·8	7·8	7·8	5·2	..	7·8	2·4
23	..	..	..	1·8	3·4	5·0	8·0	8·6	6·2	..	**10·0**	4·8
24	..	6·0	..	1·8	5·0	6·0	6·8	6·2	7·6	1·0	7·4	1·0
25	0·4	**6·4**	..	1·8	4·4	7·2	7·6	7·4	8·8	1·0	9·4	3·0
26	3·2	3·6	..	1·4	3·8	5·8	5·4	7·2	6·6	1·4	8·4	6·0
27	4·2	0·6	..	1·4	3·0	6·8	**3·8**	6·2	6·2	1·2	9·4	7·4
28	..	..	..	0·8	2·6	4·6	5·4	9·2	5·0	0·6	9·0	**9·2**
29	..		..	0·2	3·8	4·2	9·0	10·0	4·8	2·2	6·0	2·0
30	..		0·4	0·4	3·0	5·4	10·0	10·0	3·8	2·2	2·4	0·6
31	4·0		1·0		3·0		10·0	9·4		1·2		..
Monthly Mean.	1·9	**0·6**	1·2	1·4	3·8	7·2	8·1	**8·7**	6·3	3·5	4·4	2·6
Annual Variation.	− 2·2	− 3·5	− 2·9	− 2·7	− 0·3	+ 3·1	+ 4·0	+ 4·6	+ 2·2	− 0·6	+ 0·3	− ·015

For the days which have no entry 0·0 is to be understood.
Mean of the months from January to April, November and December ..2·0
Mean of the months from May to October .. .. ..6·3
Mean of the year .. ..4·1

Meteorological Data, 1911.

Table X.—Five-day Means.

Number of Five-day Period.	Barometric Pressure.	Temperature of the air.	Pressure of Vapour.	Additional Capacity of the air.	Rainfall.*	North or South Component of Wind.	East or West Component of Wind.	Number of Five-day Period.	Barometric Pressure.	Temperature of the Air.	Pressure of Vapour.	Additional Capacity of the Air.	Rainfall.*	North or South Component of Wind.	East or West Component of Wind.
	In.	°	In.	In.	In.	Miles.	Miles.		In.	°	In.	In.	In.	Miles.	Miles.
1	29·974	73·4	0·621	0·205	..	2·9 N	0·5 W	38	29·643	79·8	0·895	0·122	9·66	0·6 S	4·6 W
2	·953	73·6	·588	·248	..	3·7 N	0·6 W	39	·696	81·1	·918	·147	1·67	2·9 S	11·6 W
3	·908	75·0	·653	·217	..	3·7 N	0·6 W	40	·720	82·4	·921	·186	0·32	4·3 S	10·9 W
4	·909	76·8	·743	·184	..	2·3 N	0·5 W	41	·734	82·3	·902	·201	0·25	4·2 S	9·7 W
5	·870	77·2	·706	·235	..	2·3 N	0·7 W	42	·749	82·2	·895	·205	0·22	3·3 S	5·1 W
6	·882	71·7	·497	·286	0·02	5·1 N	2·3 W	43	·728	80·0	·889	·137	3·89	1·9 S	10·1 W
7	·937	**69·8**	**·446**	·293	0·04	**5·6** N	0·3 W	44	·708	78·0	·865	**·096**	**11·00**	0·8 S	**12·2** W
8	·975	72·5	·550	·253	..	4·2 N	1·0 W	45	·733	81·0	·881	·179	0·27	4·4 S	11·0 W
9	**·990**	75·0	·548	·333	..	4·5 N	0·1 W	46	·689	80·7	·874	·173	0·93	5·5 S	11·0 W
10	·959	74·7	·620	·245	..	4·7 N	2·3 W	47	·715	80·3	·875	·160	0·92	5·0 S	8·7 W
11	·953	77·2	·710	·231	..	3·7 N	2·4 W	48	·764	80·1	·864	·165	0·78	1·7 S	6·5 W
12	·928	76·8	·711	·214	..	3·2 N	2·9 W	49	·783	78·6	·867	·112	2·80	1·0 S	9·7 W
13	·878	75·9	·660	·239	..	3·6 N	3·3 W	50	·788	80·2	·869	·163	1·28	0·1 S	9·1 W
14	·833	77·2	·696	·241	..	0·6 N	2·4 W	51	·781	80·9	·856	·200	0·17	2·5 S	7·1 W
15	·868	77·1	·626	·311	..	3·2 N	3·0 W	52	·842	80·8	·854	·198	0·18	2·5 S	3·2 W
16	·924	77·2	·638	·300	..	3·6 N	3·2 W	53	·795	80·9	·823	·234	0·01	0·8 N	3·8 W
17	·876	79·4	·690	·318	..	5·5 N	4·2 W	54	·755	80·7	·867	·182	0·24	0·4 N	6·4 W
18	·874	79·8	·762	·261	..	4·3 N	4·4 W	55	·780	81·7	·859	·224	..	0·5 N	3·8 W
19	·802	79·1	·743	·255	..	4·8 N	4·8 W	56	·803	82·3	·898	·208	..	2·9 N	3·8 W
20	·802	79·3	·746	·258	..	4·7 N	5·4 W	57	·846	82·6	·911	·205	..	0·1 S	1·8 W
21	·818	79·1	·765	·234	..	2·1 N	4·8 W	58	·860	82·8	·912	·212	..	3·6 N	3·8 W
22	·855	80·3	·770	·268	..	2·2 N	5·5 W	59	·895	83·2	·912	·229	..	0·7 N	0·2 W
23	·892	80·7	·833	·217	..	5·5 N	5·8 W	60	·927	80·8	·795	·260	..	0·1 N	0·1 W
24	·797	83·4	·848	·298	..	2·2 N	4·4 W	61	·949	80·5	·764	·283	..	3·3 N	0·5 W
25	·818	83·2	·874	·264	..	0·3 S	3·8 W	62	·943	81·6	·820	·264	..	1·9 N	0·2 W
26	·794	84·0	·901	·267	..	0·2 N	4·5 W	63	·945	80·7	·800	·253	..	1·0 N	0·8 E
27	·756	83·9	·921	·245	..	3·1 N	5·4 W	64	·877	80·1	·772	·262	..	2·6 N	0·3 W
28	·745	84·5	·902	·286	..	1·9 S	3·4 W	65	·845	79·8	·730	·291	..	3·4 N	1·1 W
29	·723	85·4	·915	·306	0·01	0·0	4·6 W	66	·760	79·4	·822	·183	0·27	3·8 N	1·2 E
30	·747	**86·6**	·952	·318	0·03	0·6 N	7·3 W	67	·876	80·6	·868	·179	..	0·4 N	0·1 W
31	·726	85·3	·947	·273	0·80	2·3 N	6·5 W	68	·890	80·4	·770	·273	..	3·6 N	0·6 W
32	·645	83·7	**·965**	·189	0·84	3·2 S	1·6 W	69	·899	80·3	·750	·288	..	2·0 N	1·1 E
33	**·591**	81·0	·942	·116	6·74	**7·8** S	4·3 W	70	·941	79·1	·669	·334	..	3·6 N	1·0 E
34	·673	82·3	·949	·156	2·30	3·8 S	9·2 W	71	·969	77·7	·645	·309	..	2·3 N	0·7 E
35	·747	83·6	·927	·226	0·02	2·9 S	8·4 W	72	·962	78·1	·634	**·335**	..	3·5 N	**2·1** E
36	·780	83·4	·904	·242	0·15	0·1 N	8·0 W	73	·919	78·1	·669	·298	..	2·3 N	1·2 E
37	·716	83·9	·916	·247	0·70	0·6 S	5·5 W								

* Five-day sums, *not means*.

Barometric Pressure, 1912.

TABLE Ia.—*Daily and Monthly Means.*

Height of the Barometer above mean sea-level=37 feet.

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	29·927	30·016	29·881	29·841	29·791	29·755	29·698	29·682	29·691	29·794	29·865	29·922
2 ..	·940	29·977	·914	·865	·782	·784	·700	·696	·671	·824	·901	·971
3 ..	·948	·935	·917	·851	·779	·783	·705	·724	·730	·832	·924	·990
4 ..	·968	·952	·930	·850	·839	·758	·700	·717	·738	·829	·923	·970
5 ..	·996	·987	·926	·840	·805	·738	·693	·685	·698	·834	·924	·924
6 ..	·996	·971	·958	·904	·807	·737	·653	·690	·658	·829	·914	·942
7 ..	·936	·952	·971	·921	·830	·743	·579	·651	·739	·859	·922	·961
8 ..	·928	·941	·948	·857	·818	·708	·486	·590	·836	·890	·961	·969
9 ..	·915	·921	·927	·843	·774	·683	·516	·615	·869	·901	·924	·990
10 ..	·927	·902	·900	·853	·762	·663	·569	·697	·860	·896	·867	30·007
11 ..	·943	·914	·891	·903	·767	·642	·623	·736	·847	·891	·874	29·990
12 ..	·959	·916	·849	·914	·752	·616	·666	·773	·853	·846	·909	·992
13 ..	·951	·901	·834	·877	·717	·567	·708	·794	·890	·860	·913	30·004
14 ..	·971	·931	·817	·848	·734	·558	·705	·742	·873	·840	·873	·023
15 ..	·997	·934	·819	·868	·765	·571	·674	·713	·851	·844	·855	29·995
16 ..	30·015	·914	·838	·821	·745	·553	·645	·707	·845	·841	·857	·950
17 ..	·000	·912	·841	·846	·712	·494	·659	·690	·845	·873	·859	·946
18 ..	·015	·926	·857	·795	·730	·497	·660	·698	·820	·878	·848	·928
19 ..	·050	·894	·873	·797	·758	·535	·605	·702	·779	·883	·848	·881
20 ..	·027	·892	·918	·757	·758	·570	·577	·723	·742	·860	·837	·878
21 ..	·000	·925	·895	·750	·766	·625	·556	·763	·743	·837	·820	·916
22 ..	·029	·903	·871	·762	·778	·692	·552	·756	·791	·820	·776	·946
23 ..	29·996	·886	·841	·763	·795	·688	·573	·726	·798	·802	·871	·979
24 ..	·987	·869	·843	·755	·799	·637	·582	·702	·777	·798	·888	·970
25 ..	30·002	·841	·901	·784	·790	·624	·570	·725	·752	·827	·899	·917
26 ..	29·963	·842	·854	·786	·771	·634	·584	·703	·793	·858	·902	·917
27 ..	·991	·875	·831	·827	·778	·651	·561	·646	·799	·875	·910	·941
28 ..	·994	·889	·848	·831	·804	·618	·489	·632	·806	·909	·932	·968
29 ..	·984	·848	·828	·828	·805	·612	·525	·662	·823	·863	·946	·965
30 ..	·984		·826	·836	·793	·650	·648	·690	·808	·822	·926	·984
31 ..	30·012		·841		·754		·689	·726		·848		·969
Monthly Mean.	29·980	29·916	29·877	29·833	29·776	29·646	29·618	29·702	29·791	29·850	29·889	29·958
Annual Variation.	+·160	+·096	+·057	+·013	−·044	−·174	−·202	−·118	−·029	+·030	+·069	+·138

Annual mean .. .. .. in. 29·820

TABLE Ib.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0·001 inch.

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 7	0	+ 10	+ 7	+ 3	+ 6	+ 1	+ 11	+ 5	0	+ 3	+ 2	+ 3	+ 4
1 7	− 8	− 2	− 8	− 7	− 8	− 13	− 4	− 11	− 15	− 10	− 10	− 8	− 9
2 7	− 20	− 16	− 22	− 20	− 20	− 24	− 19	− 26	− 27	− 23	− 20	− 21	− 21
3 7	− 25	− 23	− 29	− 23	− 20	− 28	− 27	− 32	− 30	− 26	− 26	− 30	− 27
4 7	− 25	− 25	− 28	− 19	− 16	− 25	− 27	− 32	− 27	− 21	− 23	− 28	− 25
5 7	− 14	− 15	− 14	− 3	− 4	− 15	− 23	− 23	− 15	− 9	− 13	− 19	− 14
6 7	+ 1	− 2	+ 3	+ 11	+ 13	+ 3	− 10	− 11	− 1	+ 9	+ 5	− 2	+ 2
7 7	+ 23	+ 21	+ 27	+ 35	+ 34	+ 21	+ 7	+ 10	+ 21	+ 31	+ 27	+ 21	+ 23
8 7	+ 47	+ 43	+ 49	+ 55	+ 51	+ 35	+ 21	+ 25	+ 39	+ 49	+ 46	+ 47	+ 42
9 7	+ 63	+ 63	+ 62	+ 67	+ 57	+ 43	+ 32	+ 37	+ 49	+ 60	+ 63	+ 63	+ 55
10 7	+ 61	+ 64	+ 63	+ 61	+ 56	+ 41	+ 35	+ 41	+ 48	+ 54	+ 55	+ 60	+ 53
11 7	+ 43	+ 49	+ 50	+ 51	+ 44	+ 35	+ 31	+ 35	+ 38	+ 32	+ 35	+ 41	+ 40
12 7	+ 10	+ 20	+ 23	+ 29	+ 24	+ 23	+ 19	+ 22	+ 17	+ 6	+ 6	+ 13	+ 18
13 7	− 20	− 10	− 6	0	− 1	+ 6	+ 5	+ 4	− 6	− 21	− 24	− 20	− 8
14 7	− 42	− 36	− 31	− 30	− 23	− 11	− 10	− 13	− 28	− 46	− 43	− 42	− 30
15 7	− 49	− 50	− 48	− 49	− 45	− 31	− 23	− 27	− 41	− 57	− 50	− 50	− 43
16 7	− 47	− 51	− 54	− 62	− 55	− 39	− 32	− 34	− 44	− 54	− 48	− 48	− 47
17 7	− 37	− 43	− 47	− 60	− 54	− 36	− 30	− 29	− 35	− 42	− 36	− 36	− 40
18 7	− 24	− 33	− 34	− 47	− 40	− 28	− 22	− 18	− 21	− 26	− 22	− 20	− 28
19 7	− 10	− 14	− 15	− 28	− 26	− 12	− 5	− 3	− 5	− 3	− 2	0	− 10
20 7	+ 10	+ 6	+ 3	− 9	− 8	+ 2	+ 8	+ 10	+ 11	+ 16	+ 15	+ 17	+ 7
21 7	+ 21	+ 20	+ 20	+ 9	+ 5	+ 13	+ 22	+ 23	+ 24	+ 26	+ 23	+ 26	+ 19
22 7	+ 19	+ 21	+ 22	+ 16	+ 18	+ 18	+ 27	+ 27	+ 23	+ 24	+ 22	+ 25	+ 22
23 7	+ 12	+ 16	+ 18	+ 14	+ 16	+ 14	+ 25	+ 20	+ 15	+ 17	+ 15	+ 15	+ 16
Range.	112	115	117	129	112	82	67	75	93	117	113	113	102

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Temperature of the Air, 1912.

TABLE IIa.—*Daily and Monthly Means.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	78·0	75·2	77·1	81·1	83·5	85·8	**84·6**	81·5	78·6	83·5	79·8	**74·0**
2 ..	77·2	73·1	76·7	81·0	**83·1**	85·8	84·4	**81·7**	79·3	83·5	79·6	75·7
3 ..	75·9	**72·2**	76·1	**81·0**	84·0	86·0	83·3	80·1	79·7	82·8	79·7	77·9
4 ..	75·8	73·6	**75·8**	81·5	85·5	87·1	82·5	80·4	81·0	81·8	79·4	77·0
5 ..	75·2	75·7	76·1	82·4	86·0	86·9	82·9	80·0	80·5	81·4	80·1	77·6
6 ..	75·8	75·1	76·1	82·2	85·0	86·8	81·3	81·3	79·3	81·2	80·6	77·0
7 ..	74·8	75·1	76·3	81·8	83·7	87·6	81·6	80·6	**78·3**	81·5	80·1	74·7
8 ..	73·9	75·0	76·0	83·6	83·6	88·0	81·0	79·1	79·9	81·1	80·8	77·3
9 ..	73·9	76·4	77·4	83·6	84·3	88·0	80·7	78·7	79·9	79·6	79·9	**78·2**
10 ..	74·1	76·8	78·3	83·1	84·3	88·0	84·0	80·5	80·2	80·7	78·4	77·6
11 ..	**72·2**	76·2	79·0	83·6	84·6	**88·4**	83·6	81·2	80·3	80·5	78·6	77·5
12 ..	72·5	76·4	79·4	84·1	85·0	86·9	83·2	81·1	80·2	81·6	78·7	76·9
13 ..	72·7	76·5	79·6	84·5	85·9	83·9	83·7	80·3	80·7	82·3	79·3	76·5
14 ..	73·8	75·7	79·5	83·6	86·3	84·8	83·2	80·0	80·8	80·9	80·4	76·9
15 ..	73·3	75·2	78·8	84·0	86·2	84·7	82·8	80·3	81·1	82·6	81·5	76·1
16 ..	72·2	76·0	78·9	83·0	86·1	83·3	80·2	80·4	81·0	82·4	82·5	76·1
17 ..	74·8	76·1	79·0	83·0	86·1	81·0	81·9	80·7	80·9	82·9	**83·5**	76·1
18 ..	75·6	77·2	78·8	84·0	86·4	80·1	81·7	81·5	81·3	**84·7**	82·8	74·8
19 ..	76·1	77·9	79·6	83·5	**86·6**	79·9	80·1	80·6	82·2	84·2	83·0	74·8
20 ..	78·0	78·6	79·9	84·2	86·4	**79·1**	79·4	80·6	82·7	83·8	82·7	75·4
21 ..	76·2	**79·6**	79·6	84·8	86·1	83·6	**78·6**	80·7	82·1	83·1	80·4	76·4
22 ..	75·6	78·8	78·7	85·0	85·9	84·6	81·0	81·5	79·4	81·6	76·3	77·0
23 ..	75·7	78·6	79·5	85·4	85·9	84·1	81·3	81·0	81·5	81·6	75·3	77·0
24 ..	75·4	76·8	80·8	**86·6**	86·5	84·5	82·0	80·3	**83·8**	82·4	75·4	75·9
25 ..	75·8	76·2	81·1	85·7	86·0	85·3	81·1	**78·4**	83·1	81·9	74·8	74·7
26 ..	78·5	76·7	80·8	83·3	85·8	85·3	81·3	80·5	82·5	**79·3**	75·9	74·9
27 ..	**79·6**	76·5	80·9	83·0	86·4	82·6	81·6	81·4	81·8	80·9	77·2	75·4
28 ..	79·5	76·1	80·4	82·9	85·8	81·5	79·7	80·0	82·4	81·6	77·4	76·9
29 ..	77·8	76·2	79·5	83·1	85·9	81·3	78·7	80·7	83·0	79·8	75·6	76·7
30 ..	76·9		**82·1**	84·0	85·3	84·4	81·7	79·8	83·1	79·5	**74·6**	76·4
31 ..	76·8		81·4		85·3		81·8	79·8		79·6		76·0
Monthly Mean.	**75·6**	76·2	78·8	83·4	**85·4**	84·7	81·8	80·5	81·0	81·8	79·1	76·3
Annual Variation.	**− 4·8**	− 4·2	− 1·6	+ 3·0	**+ 5·0**	+ 4·3	+ 1·4	+ 0·1	+ 0·6	+ 1·4	− 1·3	− 4·1

Annual Mean .. .. .. 80·4

TABLE IIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.	°	°	°	°	°	°	°	°	°	°	°	°	°
0 2	− 2·4	− 2·3	− 2·0	− 2·1	− 2·1	− 1·5	− 0·5	− 0·9	− 1·5	− 1·9	− 2·2	− 2·6	− 1·8
1 2	− 2·9	− 2·5	− 2·4	− 2·4	− 2·5	− 1·8	− 0·6	− 1·1	− 1·8	− 2·2	− 2·6	− 3·2	− 2·2
2 2	− 3·3	− 2·8	− 2·7	− 2·7	− 2·7	− 2·1	− 0·7	− 1·4	− 1·9	− 2·5	− 2·9	− 3·3	− 2·4
3 2	− 3·7	− 3·1	− 3·3	− 3·3	− 3·1	− 2·3	− 0·9	− 1·5	− 2·2	− 2·6	− 3·3	− 3·8	− 2·8
4 2	− 4·2	− 3·4	− 3·7	− 3·6	− 3·2	− 2·3	− 0·9	− 1·4	− 2·3	− 2·9	− 3·6	− 4·1	− 3·0
5 2	− 4·5	− 3·6	− 4·1	− 3·9	− 3·4	− 2·5	− 1·0	− 1·4	− 2·6	− 3·2	− 3·8	− 4·4	− 3·2
6 2	− 4·7	− 3·8	− 4·4	− 4·1	− 3·3	− 2·4	− 1·1	− 1·2	− 2·5	− 3·4	− 4·1	− 4·6	− 3·3
7 2	− 5·1	− 4·0	− 4·1	− 2·9	− 2·1	− 1·7	− 0·9	− 1·3	− 2·1	− 3·0	− 3·8	− 4·6	− 3·0
8 2	− 3·6	− 2·6	− 1·9	− 1·0	− 0·6	− 0·7	− 0·5	− 0·6	− 1·0	− 1·8	− 2·7	− 3·4	− 1·7
9 2	− 2·1	− 1·1	− 0·3	+ 0·6	+ 0·6	0	− 0·1	0	− 0·2	− 0·6	− 1·2	− 2·0	− 0·5
10 2	+ 0·6	+ 1·0	+ 1·7	+ 2·3	+ 2·1	+ 1·2	+ 0·6	+ 1·0	+ 1·3	+ 1·1	+ 1·0	+ 0·3	+ 1·2
11 2	+ 2·5	+ 2·7	+ 3·0	+ 3·1	+ 3·1	+ 2·2	+ 1·2	+ 1·4	+ 2·0	+ 2·6	+ 3·0	+ 2·5	+ 2·4
12 2	+ 4·7	+ 4·0	+ 4·2	+ 3·9	+ 4·0	+ 3·1	+ 1·4	+ 1·8	+ 3·0	+ 3·7	+ 4·6	+ 4·4	+ 3·6
13 2	+ 5·8	+ 4·6	+ 4·6	+ 4·3	+ 4·3	+ 3·3	+ 1·5	+ 2·2	+ 3·4	+ 4·2	+ 5·5	+ 6·2	+ 4·2
14 2	+ **6·4**	+ **5·1**	+ **5·1**	+ **4·7**	+ **4·5**	+ **3·4**	+ **1·7**	+ **2·4**	+ **3·5**	+ **4·5**	+ **6·0**	+ **6·9**	+ **4·5**
15 2	+ 6·2	+ 5·1	+ 4·9	+ 4·5	+ 4·3	+ 3·0	+ 1·3	+ 1·8	+ 3·4	+ 4·4	+ 5·4	+ 6·5	+ 4·2
16 2	+ 5·5	+ 4·6	+ 4·5	+ 3·9	+ 3·8	+ 2·7	+ 1·0	+ 1·3	+ 3·2	+ 3·6	+ 4·5	+ 5·5	+ 3·7
17 2	+ 3·9	+ 3·3	+ 3·1	+ 2·7	+ 2·5	+ 1·5	+ 0·3	+ 0·8	+ 2·2	+ 2·0	+ 2·7	+ 3·6	+ 2·4
18 2	+ 2·2	+ 1·5	+ 1·2	+ 1·0	+ 0·5	+ 0·5	− 0·1	+ 0·3	+ 0·5	+ 0·9	+ 1·4	+ 2·1	+ 1·0
19 2	+ 1·2	+ 0·5	+ 0·2	− 0·1	− 0·7	− 0·4	− 0·5	− 0·3	− 0·2	+ 0·2	+ 0·7	+ 1·2	+ 0·1
20 2	+ 0·6	0	− 0·1	− 0·5	− 1·1	− 0·8	− 0·5	− 0·4	− 0·6	− 0·2	+ 0·1	+ 0·5	− 0·2
21 2	− 0·1	− 0·6	− 0·6	− 1·0	− 1·4	− 1·1	− 0·4	− 0·5	− 0·8	− 0·8	− 0·6	− 0·4	− 0·7
22 2	− 0·9	− 1·1	− 1·2	− 1·3	− 1·6	− 1·1	− 0·4	− 0·7	− 1·0	− 1·3	− 1·4	− 1·3	− 1·1
23 2	− 1·9	− 2·0	− 1·6	− 1·7	− 1·9	− 1·4	− 0·5	− 0·9	− 1·3	− 1·8	− 2·0	− 2·1	− 1·6
Range.	11·5	9·1	9·5	8·8	7·9	5·9	2·8	3·9	6·1	7·9	10·1	11·5	7·8

Temperature of the Air, 1912.

TABLE IIc.—*Showing the Maximum temperature of the Air on each day during the year 1912.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1	88·1	82·9	85·1	89·0	90·7	92·2	**89·1**	85·2	83·1	89·1	87·2	82·9
2	85·6	83·1	84·5	89·1	91·2	92·8	89·1	85·7	84·1	90·8	85·9	84·1
3	84·4	82·9	84·1	89·3	91·2	92·6	88·2	83·1	85·2	89·6	87·1	**87·1**
4	86·1	81·4	84·7	89·3	94·3	93·2	86·3	82·3	85·9	88·1	87·1	84·1
5	84·6	83·0	84·1	90·4	**95·0**	93·4	86·1	82·1	84·8	88·0	87·5	83·3
6	86·1	83·1	84·5	89·9	91·5	93·2	84·4	85·3	84·1	88·1	88·1	82·9
7	85·0	82·1	85·0	91·3	91·6	93·8	85·3	84·9	82·7	88·9	87·1	83·1
8	83·9	82·1	85·9	93·2	91·0	93·7	84·5	81·8	84·5	88·1	89·1	86·1
9	83·4	84·3	86·6	93·0	91·2	93·8	85·6	80·2	84·1	85·9	90·0	86·2
10	81·9	84·1	87·6	92·4	91·8	93·4	88·1	84·7	84·7	87·7	88·1	85·1
11	80·5	83·6	87·3	89·6	91·5	**95·3**	87·1	85·1	84·9	87·3	88·1	84·3
12	82·5	83·1	87·7	92·0	92·1	95·2	87·7	84·1	84·7	87·9	88·1	84·1
13	82·9	83·4	87·6	93·4	91·5	89·3	87·5	83·3	86·1	89·9	90·4	85·6
14	84·6	84·0	88·4	90·2	92·4	91·4	87·9	84·6	86·9	88·1	91·0	85·2
15	82·6	84·0	87·2	90·4	92·0	88·6	86·1	83·0	87·1	89·1	89·7	85·3
16	81·3	84·0	87·3	91·2	92·3	87·1	80·8	84·1	88·1	90·0	90·2	85·1
17	85·1	85·5	86·9	91·1	92·4	84·1	85·1	85·1	88·1	90·2	**92·4**	85·3
18	83·2	85·1	87·4	92·9	92·2	83·1	85·4	85·9	88·6	92·2	91·2	84·0
19	85·1	87·2	86·3	91·2	92·4	82·3	85·1	85·2	89·5	**92·4**	91·4	83·9
20	90·2	88·3	86·1	91·2	92·7	83·1	80·2	86·1	89·3	91·2	91·8	85·3
21	86·3	**92·0**	88·6	93·1	92·4	88·1	79·0	85·1	89·9	91·2	84·1	85·2
22	85·0	88·9	87·7	93·2	92·2	89·1	82·1	**87·0**	86·4	91·8	78·4	86·6
23	83·9	89·3	88·1	92·4	92·2	88·9	85·2	85·9	87·5	89·3	81·4	86·1
24	85·0	84·4	87·9	93·6	92·5	89·6	85·4	85·1	**90·2**	89·3	82·9	85·7
25	85·7	84·3	87·5	**94·2**	92·8	89·9	82·6	83·8	88·9	87·1	83·1	84·1
26	**92·1**	85·1	87·9	91·4	93·0	90·4	83·4	85·3	88·1	83·5	84·1	83·4
27	91·0	85·2	88·8	90·5	92·9	88·3	84·9	86·5	88·1	87·1	84·3	84·9
28	91·2	83·7	87·9	89·6	94·2	87·3	84·0	84·7	88·7	89·1	83·7	87·1
29	85·9	85·1	88·9	89·0	93·0	85·9	82·0	84·5	89·3	88·1	82·4	87·1
30	82·9		**92·3**	91·0	90·2	88·1	85·1	84·9	88·6	87·7	82·1	85·6
31	83·9		90·3		91·0		85·2	83·9		89·1		84·7
Monthly Mean.	85·2	84·7	87·1	91·3	**92·2**	89·9	85·1	**84·5**	86·7	88·9	86·9	85·0

Annual Mean .. 87·3°

The greatest maximum temperature recorded during the year (that of 11th June) was .. 95·3°

TABLE IId.—*Showing the Minimum temperature of the Air on each day during the year 1912.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1	72·1	71·3	72·3	**74·6**	78·7	81·6	82·4	78·3	76·6	79·7	73·8	68·3
2	71·8	68·3	72·3	76·1	78·4	80·8	81·5	79·2	75·2	79·8	74·8	69·8
3	70·3	**66·4**	70·7	77·2	79·4	82·2	80·6	75·5	75·6	80·4	75·4	72·4
4	67·8	68·6	70·3	77·0	80·4	83·9	78·4	77·6	76·4	78·9	74·4	71·5
5	68·5	70·3	70·3	76·8	80·9	83·3	81·4	77·8	76·9	78·5	75·6	72·5
6	68·3	71·3	70·5	76·8	80·4	82·7	79·7	77·6	76·3	77·4	75·4	74·6
7	68·7	71·3	72·8	75·7	78·6	83·6	78·4	78·2	**74·6**	79·4	74·6	68·1
8	67·5	71·3	**69·3**	77·6	78·4	84·6	79·1	77·8	76·8	78·4	74·9	71·4
9	69·1	71·3	70·5	78·4	79·4	84·5	77·4	77·2	76·3	75·8	73·3	73·2
10	71·5	73·3	71·2	77·2	79·4	84·6	79·4	76·5	76·1	77·4	71·8	71·6
11	65·4	72·3	73·2	78·4	80·7	84·4	80·8	79·0	75·4	77·1	72·3	72·0
12	**64·5**	72·3	72·1	78·6	80·4	82·1	81·2	79·1	76·2	78·6	72·1	72·4
13	65·3	72·3	72·5	79·4	82·2	83·3	80·1	76·4	76·8	77·6	72·9	71·8
14	65·2	71·1	74·6	79·4	82·4	79·8	80·2	77·0	76·4	76·2	73·2	71·2
15	66·3	70·8	72·6	81·1	82·2	81·5	81·3	76·3	77·4	78·4	76·0	70·3
16	66·1	71·2	72·1	78·4	81·9	79·4	77·2	78·4	77·4	77·2	77·5	70·2
17	68·3	71·3	73·3	79·4	80·4	77·4	77·4	77·1	76·4	77·5	79·6	71·2
18	70·3	71·3	73·3	78·0	82·4	78·4	78·0	78·6	76·4	79·7	77·6	68·9
19	70·3	71·3	74·9	78·4	83·2	77·5	77·3	76·4	79·1	78·7	79·4	67·6
20	71·3	71·3	75·4	78·9	82·4	75·9	76·8	77·5	79·4	79·2	77·6	68·5
21	70·1	70·5	73·3	79·7	82·6	77·2	76·1	78·1	81·0	77·8	79·6	71·3
22	70·5	72·3	74·4	80·6	82·1	81·9	77·4	78·4	76·2	74·0	74·7	71·3
23	72·3	71·8	73·3	81·4	82·4	81·4	78·4	77·2	76·2	76·2	71·0	71·4
24	69·3	73·3	74·7	82·1	82·4	80·6	78·2	76·9	80·2	78·2	69·3	70·5
25	68·3	71·7	77·4	82·6	82·4	82·4	77·9	**75·4**	80·2	78·2	**68·4**	69·1
26	72·5	71·3	75·4	79·4	81·9	81·4	79·4	76·6	79·1	77·7	71·4	69·7
27	73·3	72·3	75·4	78·9	82·2	78·4	78·4	78·1	78·1	76·6	71·3	**67·3**
28	73·4	72·8	75·7	78·5	84·4	78·4	77·4	78·4	78·0	77·8	72·8	70·8
29	72·4	71·3	74·1	78·4	**78·1**	**75·4**	76·4	75·6	78·8	**73·1**	71·0	70·4
30	72·3		74·4	79·4	83·2	82·2	**74·4**	77·4	79·2	74·4	69·3	71·0
31	73·3		76·2		80·2		79·4	76·6		74·1		71·0
Monthly Mean.	**69·6**	71·2	73·2	78·6	**81·1**	81·0	78·8	77·4	77·3	77·5	74·0	70·7

Annual Mean .. 75·9°

The least minimum temperature recorded during the year (that of 12th January) was .. 64·5°

Pressure of Vapour, 1912.

TABLE IIIa.—*Daily and Monthly Means.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	0·650	0·535	0·677	0·812	0·862	**0·906**	0·949	0·918	0·861	0·903	0·783	0·569
2 ..	·613	**·440**	·637	·807	·867	·921	·945	·916	·868	·850	·833	·613
3 ..	·639	·537	·620	·875	·892	·925	·948	·915	·864	·835	·814	·670
4 ..	·599	·618	·593	·854	·860	·952	·941	·913	·848	·867	·807	·669
5 ..	·609	·651	**·528**	·790	892	·938	925	·902	·825	·844	·820	**·727**
6 ..	·541	·652	·599	·762	·951	·929	·928	**·929**	·827	·881	·798	·699
7 ..	·545	·665	·615	**·710**	·872	·949	·942	·915	·820	·933	·730	·578
8 ..	·638	·677	·555	·752	·875	·979	·944	·919	·819	·911	·688	·709
9 ..	·691	·705	·668	·757	·862	·962	·925	·901	·798	·890	·652	·716
10 ..	·648	·681	·679	·816	·914	·974	**·967**	·909	·801	·918	·590	·713
11 ..	·512	·676	·708	·910	·949	**·993**	·945	·920	·805	·908	·604	·680
12 ..	·506	·663	·655	·919	·954	·976	·926	914	·797	**·968**	·586	·609
13 ..	·524	·627	·650	·873	·951	·980	·930	·876	**·787**	·902	·573	**·532**
14 ..	**·469**	·621	·624	**·939**	·959	·961	·924	·869	·823	·871	·632	·578
15 ..	·482	·659	·706	·916	·938	·927	·916	·883	·821	·924	·790	·641
16 ..	·557	·644	·739	·866	·943	·951	·916	·891	·837	·880	**·842**	·606
17 ..	·606	·725	·746	·871	·947	·957	·937	·892	·851	·886	·829	·602
18 ..	·674	**·732**	·763	·842	·951	·937	·945	·903	·854	·863	·773	·639
19 ..	·653	·706	·841	·936	·931	·908	·943	·884	·912	·809	·706	·627
20 ..	·649	·652	·848	·932	·872	·910	·934	·899	·938	·776	·723	·669
21 ..	·636	·604	·784	·866	·858	·991	·922	·901	·929	·666	·811	·689
22 ..	·682	·648	·779	·901	**·844**	·988	·931	·900	·878	**·640**	·830	·707
23 ..	·733	·632	·758	·923	·848	·966	·925	·881	·914	·738	·721	·683
24 ..	·633	·665	·818	·899	·869	·968	·940	**·852**	**·966**	·861	·640	·621
25 ..	·573	·665	**·884**	·832	·876	·972	·918	·856	·952	·923	·627	·620
26 ..	·681	·675	·831	·858	·906	·970	·905	·874	·939	·881	·671	·682
27 ..	·689	·712	·813	·832	·929	·954	·912	·864	·890	·906	·664	·654
28 ..	·654	·667	·741	·865	·950	·940	·909	·854	·918	·834	·603	·662
29 ..	·698	·672	·715	·865	**·988**	·920	**·870**	·877	·941	·790	·561	·647
30 ..	**·772**		·731	·861	·957	·955	·923	·869	·884	·761	**·539**	·664
31 ..	·716		·819		·920		·917	·863		·770		·669
Monthly Mean.	**0·622**	0·648	0·714	0·855	0·909	**0·952**	0·929	0·892	0·866	0·851	0·708	0·650
Annual Variation.	−·178	−·152	−·086	+·055	+·109	+·152	+·129	+·092	+·066	+·051	−·092	−·150

Annual Mean — Inch. 0·800

TABLE IIIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0.001 inch.

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 2	+ 4	− 12	+ 13	+ 7	− 5	− 1	− 3	− 10	− 17	− 10	+ 6	+ 8	− 2
1 2	+ 12	− 3	+ 5	− 2	− 10	− 7	− 8	− 16	− 16	− 19	− 5	− 8	− 6
2 2	− 2	+ 2	+ 2	− 8	− 13	− 13	− 14	− 20	− 22	− 23	− 16	+ 11	− 10
3 2	− 16	+ 2	− 8	− 12	− 18	− 17	**− 17**	− 19	− 24	− 19	− 24	− 10	− 15
4 2	− 30	− 5	− 18	− 5	− 17	− 24	− 11	− 22	− 18	− 14	− 20	− 21	− 17
5 2	− 35	− 5	− 25	− 14	**− 20**	**− 26**	− 15	**− 24**	− 14	− 18	− 20	− 32	− 21
6 2	− 40	− 5	− 27	**− 17**	− 18	− 22	− 15	− 16	− 7	**− 25**	− 23	− 43	**− 21**
7 2	**− 55**	− 6	**− 31**	− 4	− 13	− 12	− 4	− 14	+ 8	− 16	− 25	− 49	− 18
8 2	− 41	+ 1	− 31	− 5	− 9	− 6	+ 3	+ 3	+ 19	+ 2	− 14	− 40	− 10
9 2	− 42	+ 4	− 22	− 6	− 4	− 4	+ 6	+ 12	+ 24	+ 2	− 11	− 39	− 7
10 2	− 19	+ 9	− 8	+ 7	+ 7	+ 9	+ 8	+ 24	**+ 40**	0	− 15	− 30	+ 3
11 2	− 20	− 6	− 12	+ 24	+ 8	+ 20	+ 17	+ 25	+ 37	− 10	− 16	− 24	+ 4
12 2	− 40	− 8	+ 13	+ 33	+ 15	**+ 25**	+ 23	+ 28	+ 39	− 12	− 13	− 46	+ 5
13 2	− 31	+ 7	+ 10	**+ 34**	+ 20	+ 15	+ 24	**+ 33**	+ 32	− 12	**− 28**	**− 68**	+ 3
14 2	+ 4	**+ 21**	+ 14	+ 14	+ 18	+ 21	**+ 25**	+ 29	+ 26	− 2	− 11	− 27	+ 11
15 2	+ 18	+ 18	**+ 19**	− 15	**+ 23**	+ 12	+ 14	+ 23	+ 12	+ 18	+ 21	+ 23	+ 15
16 2	+ 36	+ 18	+ 18	− 14	+ 7	+ 18	+ 9	+ 18	+ 7	+ 19	+ 37	+ 47	**+ 18**
17 2	+ 43	+ 10	+ 16	− 14	+ 15	+ 3	− 4	+ 4	− 8	+ 29	+ 35	+ 51	+ 15
18 2	+ 49	+ 8	+ 9	− 16	+ 4	− 1	− 7	− 3	− 23	+ 31	**+ 45**	+ 67	+ 14
19 2	+ 54	+ 5	+ 7	− 16	+ 2	+ 3	− 11	− 10	**− 26**	**+ 35**	+ 44	**+ 74**	+ 13
20 2	**+ 60**	0	+ 10	− 3	+ 9	0	− 9	− 6	− 23	+ 34	+ 42	+ 68	+ 15
21 2	+ 43	**− 16**	+ 11	+ 4	+ 3	+ 2	− 5	− 10	− 22	+ 25	+ 16	+ 50	+ 8
22 2	+ 32	− 12	+ 19	+ 9	+ 7	+ 4	+ 1	− 8	− 19	− 3	+ 3	+ 24	+ 5
23 2	+ 10	− 15	+ 11	+ 10	− 1	+ 1	− 3	− 12	− 17	− 7	− 7	+ 9	− 2
Range.	115	37	50	51	43	51	42	57	66	60	73	142	39

Additional Capacity of the Air, 1912.

TABLE IV*a*.—*Daily and Monthly Means.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	0·317	0·339	0·257	0·253	0·289	0·332	**0·240**	0·159	**0·120**	0·245	0·238	0·278
2 ..	·326	·380	·284	·255	·271	·319	·239	·167	·133	·299	·182	·284
3 ..	·262	·261	·284	**·187**	·275	·324	·191	·115	·151	·287	·202	·292
4 ..	·302	·215	·301	·226	·369	·340	·171	·123	·212	·220	·201	·264
5 ..	·273	·242	·375	·320	·354	·343	·201	·122	·216	·230	·210	·222
6 ..	·359	·223	·306	·342	·255	·349	·140	·140	·175	·186	·248	·229
7 ..	·324	·209	·292	·379	·286	·362	·137	·128	·150	·144	·303	·286
8 ..	·206	·192	·348	**·408**	·280	·349	·113	**·075**	·204	·151	·370	·235
9 ..	**·149**	·208	·275	·399	·319	**·365**	·123	·080	·227	·121	·376	·254
10 ..	·197	·243	·295	·321	·266	·353	·201	·134	·231	·130	·392	·236
11 ..	·281	·232	·287	·245	**·243**	·351	·207	·145	·230	·134	·381	·269
12 ..	·299	·251	·353	·265	·252	·305	·212	·148	·235	**·110**	·403	·319
13 ..	·288	·288	·365	·314	·290	·185	·224	·157	**·261**	·208	**·438**	**·387**
14 ..	**·376**	·271	**·387**	·215	·298	·240	·213	·155	·232	·189	·414	·355
15 ..	·344	·219	·281	·252	·317	·268	·207	·150	·242	·194	·291	·268
16 ..	·239	·256	·251	·267	·305	·191	·115	·146	·222	·231	·272	·301
17 ..	·266	**·179**	·248	·260	·304	·101	·151	·157	·205	·242	·325	·304
18 ..	·216	·206	·226	·328	·310	·089	·137	·173	·216	·338	·352	·229
19 ..	·253	·256	**·173**	·215	·338	·114	·086	·161	·189	·371	·427	·240
20 ..	·321	·333	·176	·246	·393	**·084**	·071	·147	·180	·385	·399	·220
21 ..	·274	**·417**	·232	·336	·395	·162	**·054**	·147	·171	**·477**	·229	·226
22 ..	·208	·343	·204	·306	**·396**	·203	·127	·175	·130	·444	**·075**	·229
23 ..	·157	·353	·256	·298	·396	·207	·145	·178	·165	·345	·157	·251
24 ..	·251	·257	·238	·373	·396	·224	·153	·184	·194	·250	·244	·281
25 ..	·323	·243	·179	·400	·371	·246	·142	·117	·184	·170	·242	·246
26 ..	·304	·248	·222	·288	·332	·249	·162	·164	·174	·121	·228	**·187**
27 ..	·331	·205	·244	·300	·336	·164	·165	**·209**	·199	·152	·276	·234
28 ..	·365	·234	·299	·265	·290	·138	·106	·170	·191	·249	·343	·271
29 ..	·259	·235	·298	·272	·256	·152	·111	·171	·189	·234	·331	·280
30 ..	·157		·375	·309	·257	·224	·161	·149	·249	·252	·324	·252
31 ..	·206		·258		·299		·169	·156		·250		·232
Monthly Mean.	0·272	0·260	0·277	0·295	**0·314**	0·244	0·157	**0·148**	0·196	0·238	0·296	0·263
Annual Variation.	+·025	+·013	+·030	+·048	+·067	−·003	−·090	−·099	−·051	−·009	+·049	+·016

Annual Mean .. Inch. 0·247

TABLE IV*b*.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0·001 inch.

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 2	− 78	− 57	− 82	− 87	− 80	− 58	− 15	− 18	− 37	− 59	− 83	− 88	− 62
1 2	**−100**	− 73	− 85	− 90	− 86	− 62	− 15	− 20	− 49	− 59	− 83	− 90	− 68
2 2	− 97	− 86	− 93	− 95	− 93	− 68	− 11	− 26	− 47	− 66	− 81	**−111**	− 73
3 2	− 95	− 94	− 99	−108	−100	**− 69**	− 16	**− 34**	− 52	− 73	− 81	−105	− 77
4 2	− 94	− 96	−101	−123	−107	− 65	− 19	− 25	− 64	− 88	− 96	−100	− 81
5 2	− 97	−102	−106	−128	**−109**	− 68	− 20	− 21	− 76	**− 93**	−104	− 98	− 85
6 2	− 97	−107	**−111**	**−130**	−107	− 68	− 23	− 24	**− 82**	− 93	**−109**	− 92	**− 87**
7 2	− 90	**−110**	− 99	−102	− 71	− 55	**− 26**	− 29	− 81	− 88	− 99	− 86	− 78
8 2	− 67	− 80	− 35	− 37	− 20	− 18	− 20	− 24	− 57	− 66	− 76	− 64	− 47
9 2	− 21	− 40	+ 7	+ 21	+ 25	+ 6	− 7	− 10	− 35	− 26	− 33	− 24	− 10
10 2	+ 30	+ 19	+ 60	+ 75	+ 72	+ 39	+ 14	+ 12	+ 2	+ 39	+ 41	+ 34	+ 36
11 2	+ 91	+ 89	+106	+ 89	+113	+ 69	+ 26	+ 25	+ 31	+102	+114	+ 96	+ 79
12 2	+181	+133	+128	+115	+147	+100	+ 29	+ 37	+ 64	+147	+168	+182	+119
13 2	**+213**	+139	+145	+126	+155	**+121**	+ 32	+ 46	+ 87	**+173**	+216	**+266**	+143
14 2	+199	+141	**+157**	+166	**+169**	+119	**+ 40**	**+ 57**	+ 99	+171	**+220**	+249	**+149**
15 2	+176	**+142**	+146	**+185**	+155	+110	+ 37	+ 42	**+109**	+145	+161	+184	+133
16 2	+134	+126	+131	+162	+141	+ 96	+ 29	+ 29	+105	+114	+111	+126	+109
17 2	+ 70	+ 92	+ 85	+113	+ 80	+ 59	+ 18	+ 24	+ 82	+ 43	+ 49	+ 57	+ 64
18 2	+ 9	+ 33	+ 25	+ 47	+ 12	+ 19	+ 4	+ 15	+ 39	− 2	− 5	− 9	+ 16
19 2	− 26	+ 7	− 5	+ 8	− 32	− 19	− 5	+ 2	+ 17	− 30	− 29	− 42	− 13
20 2	− 49	− 3	− 20	− 22	− 51	− 31	− 7	− 6	− 1	− 44	− 46	− 59	− 28
21 2	− 54	− 5	− 36	− 46	− 62	− 44	− 10	− 7	− 8	− 56	− 42	− 70	− 37
22 2	− 65	− 23	− 62	− 64	− 72	− 47	− 15	− 15	− 17	− 46	− 53	− 70	− 46
23 2	− 70	− 46	− 66	− 78	− 77	− 56	− 15	− 18	− 30	− 56	− 63	− 77	− 54
Range.	313	252	268	315	278	190	66	91	191	266	329	377	236

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Rainfall, 1912.

TABLE Va.—*Total fall of rain (in inches) as measured by F. Chambers's self-registering gauge, the funnel of which is 28 feet above the ground.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	..	..	..	..	..	..	..	0·04	1·02	..	..	..
2	..	..	..	..	..	..	0·06	0·05	0·32	..	..	..
3	..	..	..	..	..	..	0·16	1·77	0·38	..	..	..
4	..	..	..	..	..	..	0·31	0·39	..	..	..	..
5	..	..	..	..	..	..	0·09	0·24	..	..	..	..
6	..	..	..	..	..	..	0·69	0·14	0·31	..	..	..
7	..	..	..	..	..	..	0·08	0·09	0·04	..	..	..
8	..	..	..	..	..	..	0·24	1·64	..	0·01	..	..
9	..	..	..	..	..	..	1·52	1·07	..	0·46	..	..
10	..	..	..	..	..	..	..	0·09	..	..	..	..
11	..	..	..	..	..	..	0·07	0·02	..	..	..	..
12	..	..	..	..	..	0·02	0·49	0·01	..	..	..	..
13	..	..	..	..	..	0·58	0·02	0·05	..	..	..	..
14	..	..	..	..	..	0·01	0·13	0·35	..	..	..	..
15	..	..	..	..	..	0·09	0·19	0·13	..	..	..	..
16	..	..	..	..	..	0·13	1·99	0·20	..	..	..	..
17	..	..	..	..	..	0·77	0·64	0·02	..	..	..	..
18	..	..	..	..	..	1·29	0·68	0·04	..	..	..	..
19	..	..	..	..	..	0·89	2·75	0·03	..	..	..	..
20	..	..	..	..	..	4·34	4·10	0·10	..	..	..	..
21	..	..	..	..	..	0·02	8·04	0·33	0·40	..	0·89	..
22	..	..	..	..	..	0·02	0·03	..	0·46	..	2·60	..
23	..	..	..	..	..	0·24	0·26	0·37	..	..	..	..
24	..	..	..	..	..	..	0·20	0·07	..	..	..	..
25	..	..	..	..	..	..	0·30	0·75	..	0·07	..	..
26	..	..	..	..	..	..	0·03	0·01	..	0·07	..	..
27	..	..	..	..	..	0·56	0·09	..	..	..	..	..
28	..	..	..	..	0·38	0·07	1·41	0·52	..	..	..	..
29	..	..	..	..	..	1·00	0·84	0·26	..	..	..	..
30	..		..	..	..	..	0 05	0·49	..	..	..	..
31	..		..		..		0·36	0·33		..		..
Monthly Total.	..	..	..	..	0·38	10·03	25·82	9·60	2·93	0·61	3·49	..
Number of rainy days.	..	..	..	..	1	15	29	29	7	4	2	..

	Inches.
Total fall of rain in the year	52·86
Total number of rainy days in the year	87
The greatest daily fall of rain in the year (that of 21st July) was	8·04

No rain fell in the months of January, February, March, April and December, nor on any of the days left blank in the above table.

TABLE Vb.—*Total fall of rain (in inches) as measured by Newman's gauge, placed 4½ feet above the ground.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	..	..	..	..	..	..	..	0·05	1·07	..	..	..
2	..	..	..	..	..	..	0·06	0·05	0·32	..	..	..
3	..	..	..	..	..	..	0·17	1·73	0·39	..	..	..
4	..	..	..	..	..	..	0·31	0·38	..	..	..	..
5	..	..	..	..	..	..	0·10	0·25	..	..	..	..
6	..	..	..	..	..	..	0·72	0·15	0·33	..	..	..
7	..	..	..	..	..	..	0·08	0·09	0·04	..	..	..
8	..	..	..	..	..	..	0·25	1·65	..	0·01	..	..
9	..	..	..	..	..	..	1·50	1·07	..	0·49	..	..
10	..	..	..	..	..	..	..	0·10	..	..	..	..
11	..	..	..	..	..	..	0·07	0·02	..	..	..	..
12	..	..	..	..	..	0·03	0·49	0·01	..	..	..	..
13	..	..	..	..	..	0·65	0·02	0·06	..	..	..	..
14	..	..	..	..	..	0·01	0·13	0·36	..	..	..	..
15	..	..	..	..	..	0·10	0·19	0·12	..	..	..	..
16	..	..	..	..	..	0·19	1·92	0·17	..	..	..	..
17	..	..	..	..	..	0·89	0·64	0·03	..	..	..	..
18	..	..	..	..	..	1·45	0·69	0·05	..	..	..	..
19	..	..	..	..	..	0·93	2·76	0·03	..	..	..	..
20	..	..	..	..	..	4·53	4·17	0·11	..	..	..	..
21	..	..	..	..	..	0·02	7·86	0·34	0·46	..	1·00	..
22	..	..	..	..	..	0·02	0·04	..	0·48	..	2·62	..
23	..	..	..	..	..	0·25	0·26	0·39	..	..	..	..
24	..	..	..	..	..	..	0·17	0·05	..	..	..	..
25	..	..	..	..	..	..	0·30	0·78	..	0·07	..	..
26	..	..	..	..	..	..	0·03	0·02	..	0·08	..	..
27	..	..	..	..	..	0·63	0·09	..	..	..	..	..
28	..	..	..	..	0·43	0·07	1·45	0·54	..	..	..	..
29	..	..	..	..	..	1·02	0·87	0·28	..	..	..	..
30	..		..	..	..	..	0·06	0·49	..	..	..	..
31	..		..		..		0·37	0·33		..		..
Monthly Total.	..	..	..	..	0·43	10·79	25·77	9·70	3·09	0·65	3·62	..
Number of rainy days.	..	..	..	..	1	15	29	29	7	4	2	..

	Inches
Total fall of rain in the year	54·05
Total number of rainy days in the year	87
The greatest daily fall of rain in the year (that of 21st July) was	7·86

No rain fell in the months of January, February, March, April and December, nor on any of the days left blank in the above table.

Velocity of Wind, 1912.

Robinson Beckley's Anemograph.

Table VIa.—*Mean Velocity of the Wind in miles per hour, without regard to the direction from which it blew for each day of Bombay Civil Time, also the Mean Monthly Velocity and its variation from the mean of the year.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	6·2	**8·5**	6·2	5·9	5·4	4·7	8·4	10·6	**9·3**	4·9	4·8	5·6
2 ..	5·4	6·9	6·0	6·4	5·9	4·3	6·4	11·8	6·7	8·6	6·2	6·0
3 ..	5·6	5·1	5·1	7·8	**10·1**	4·5	7·1	**12·2**	5·9	**9·2**	6·5	6·8
4 ..	4·6	3·7	7·0	6·7	7·9	5·4	7·9	11·3	4·8	8·0	5·6	**3·7**
5 ..	5·0	5·4	5·6	7·3	6·7	6·0	7·7	10·3	5·1	6·2	7·1	4·3
6 ..	6·2	4·8	6·7	7·3	5·4	5·3	6·7	8·8	5·2	5·5	5·4	6·7
7 ..	6·2	4·8	8·3	7·6	4·6	6·3	**5·6**	9·9	5·8	4·0	**3·7**	6·3
8 ..	4·5	**3·6**	7·5	9·3	4·3	7·6	12·6	8·2	5·2	4·9	5·9	5·6
9 ..	5·5	5·3	6·7	8·8	4·9	6·3	14·4	8·6	4·8	4·8	6·0	5·4
10 ..	6·1	3·7	6·7	7·3	6·8	5·9	11·1	8·8	4·1	4·5	7·0	4·0
11 ..	6·1	4·4	7·8	4·9	7·9	7·0	8·4	8·1	5·2	4·6	6·4	5·5
12 ..	**7·6**	5·4	7·5	4·3	4·8	8·0	10·6	6·7	5·2	4·5	7·6	6·6
13 ..	7·0	5·5	8·9	6·4	5·2	6·7	9·8	7·6	4·5	**3·6**	8·9	**8·9**
14 ..	7·3	6·0	**9·5**	5·6	5·8	9·3	11·5	9·7	6·2	4·2	5·1	8·0
15 ..	7·0	8·0	8·2	8·0	5·6	**20·3**	10·7	11·7	6·2	3·9	4·6	6·8
16 ..	4·9	7·9	6·3	8·1	5·9	19·3	11·8	10·8	7·3	6·3	4·0	7·5
17 ..	4·8	6·4	5·6	6·9	4·2	17·0	9·2	8·6	7·2	5·1	6·7	6·6
18 ..	5·1	5·5	6·2	7·0	5·1	13·8	10·2	8·6	7·1	4·8	7·3	5·8
19 ..	4·7	5·0	4·5	5·1	5·2	11·4	9·5	7·5	5·9	5·3	6·6	5·9
20 ..	4·7	6·1	5·9	6·4	6·0	9·5	13·0	7·5	5·2	5·7	6·7	5·1
21 ..	4·1	5·0	5·5	7·5	5·8	10·0	**18·0**	8·1	6·5	8·5	7·4	4·5
22 ..	7·0	4·7	6·5	**9·7**	5·9	7·9	17·8	9·5	4·8	7·0	**12·5**	5·9
23 ..	7·3	8·5	8·2	9·1	5·4	7·5	15·8	10·0	4·8	6·7	5·9	6·0
24 ..	7·3	7·9	5·6	8·9	4·9	7·2	11·6	7·6	5·6	4·7	5·9	5·5
25 ..	5·8	5·6	**4·4**	9·2	5·7	7·6	14·1	**4·3**	3·7	4·0	4·5	4·1
26 ..	5·1	5·4	5·3	7·8	6·4	**4·1**	16·2	4·7	4·3	4·3	6·0	5·6
27 ..	5·0	7·1	4·5	8·4	6·2	5·6	17·0	7·2	4·0	4·9	5·9	4·4
28 ..	**4·0**	7·8	5·8	5·9	6·5	8·3	17·4	8·9	3·3	4·3	9·7	5·3
29 ..	4·8	8·4	8·2	**4·3**	6·0	9·6	15·8	8·4	3·5	4·8	8·2	5·3
30 ..	4·3		5·1	4·3	4·3	9·9	10·3	8·7	**3·2**	5·5	7·6	4·7
31 ..	4·5		5·5		**3·7**		9·3	9·5		5·4		5·6
Monthly Mean.	5·6	5·9	6·5	7·1	5·8	8·5	**11·5**	8·8	**5·4**	5·4	6·5	5·7
Annual Variation.	− 1·3	− 1·0	− 0·4	+ 0·2	− 1·1	+ 1·6	+ 4·6	+ 1·9	− 1·5	− 1·5	− 0·4	− 1·2

	Miles.
The mean velocity for June to August	.. 9·6
The mean velocity for September to May	.. 6·0
The mean velocity for the year	.. 6·9

Table VIb.—*Showing the mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year 1912, and for the whole year.*

1912. Bombay Civil Time Hourly Intervals	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles,
0 to 1	− 1·8	− 2·2	− 0·8	− 0·5	− 0·7	+ 0·1	− 0·3	+ 0·3	− **1·3**	− 1·1	− 1·5	− 1·7	− 1·0
1 „ 2	− **1·9**	− 1·8	− 1·2	− 1·5	− 1·3	− 0·3	+ 0·1	+ **0·5**	− 1·1	− 1·2	− 0·4	− 1·4	− 1·0
2 „ 3	− 1·6	− 2·1	− 2·1	− 2·6	− 2·3	− 0·5	+ 0·5	+ 0·3	− 1·1	− 1·4	− 0·7	− 1·1	− **1·2**
3 „ 4	− 1·3	− 2·0	− **2·3**	− 2·9	− 2·6	− 0·7	+ 0·5	+ 0·4	− 1·1	− 1·2	− 0·6	+ 0·3	− 1·1
4 „ 5	− 0·9	− 1·5	− 2·1	− 3·2	− 2·3	− 0·9	+ 0·1	+ 0·4	− 0·6	− 1·0	+ 0·6	+ 1·1	− 0·9
5 „ 6	− 0·6	− 0·8	− 1·9	− **3·6**	− 2·6	− 1·0	+ 0·4	+ 0·3	− 0·9	− 0·9	+ 1·4	+ 1·2	− 0·7
6 „ 7	− 0·7	− 0·6	− 1·7	− 3·4	− **2·8**	− 1·0	− 0·2	+ 0·4	− 0·7	− 0·6	+ 1·6	+ 1·4	− 0·7
7 „ 8	− 0·5	− 0·4	− 1·4	− 3·4	− 2·2	− 1·6	− 0·2	0·0	+ 0·4	− 0·5	+ 2·0	+ **1·8**	− 0·5
8 „ 9	− 0·1	+ 0·2	− 1·0	− 2·8	− 1·8	− 1·8	− 0·4	− 0·3	+ 0·4	− 0·7	+ 1·5	+ 1·5	− 0·4
9 „ 10	0·0	+ 0·1	− 1·8	− 2·3	− 1·2	− **2·1**	+ 0·1	− 0·4	− 0·6	− 1·0	+ 0·7	+ 1·2	− 0·6
10 „ 11	− 0·9	− 0·7	− 1·2	− 0·9	− 0·4	− 1·4	− **0·9**	− **0·8**	− 0·7	− **1·5**	− 0·3	+ 0·1	− 0·8
11 „ 12	− 1·1	+ 0·1	+ 0·3	+ 1·0	+ 0·7	− 0·1	− 0·7	− 0·1	− 1·0	− 0·7	− 1·7	− 1·6	− 0·4
12 „ 13	− 0·5	+ **1·5**	+ 2·3	+ 2·6	+ 1·8	+ 1·0	+ 0·6	− 0·3	+ 0·6	+ 0·4	− 1·8	− **2·2**	+ 0·5
13 „ 14	+ 1·0	+ 2·4	+ 2·9	+ 3·5	+ 2·4	+ 0·9	+ 0·2	− 0·2	+ 1·5	+ 1·5	− 1·2	− 1·8	+ 1·1
14 „ 15	+ 1·8	+ 3·1	+ 3·7	+ 4·5	+ **3·4**	+ 1·5	+ **0·7**	+ 0·2	+ **2·6**	+ 2·2	− 0·4	− 0·7	+ 1·9
15 „ 16	+ 2·3	+ **3·4**	+ **4·0**	+ **4·6**	+ 3·3	+ 1·7	+ 0·3	+ 0·4	+ 2·4	+ **2·8**	+ 0·5	+ 0·4	+ **2·2**
16 „ 17	+ **2·6**	+ 3·3	+ 3·8	+ 4·3	+ 3·4	+ **2·1**	+ 0·7	0·0	+ 2·1	+ 2·6	+ 0·9	+ 0·9	+ 2·2
17 „ 18	+ 2·6	+ 2·6	+ 3·0	+ 3·7	+ 2·8	+ 1·3	+ 0·7	+ 0·1	+ 1·6	+ 1·9	+ 1·7	+ 1·3	+ 1·9
18 „ 19	+ 2·3	+ 1·8	+ 2·0	+ 2·1	+ 2·3	+ 0·2	0·0	− 0·1	+ 0·7	+ 1·9	+ **2·1**	+ 1·7	+ 1·4
19 „ 20	+ 2·0	+ 1·1	+ 1·1	+ 1·5	+ 0·8	+ 0·7	− 0·1	− 0·1	+ 0·2	+ 1·3	+ 1·6	+ 1·4	+ 1·0
20 „ 21	+ 1·2	− 0·2	− 0·6	− 0·2	+ 0·4	+ 0·4	− 0·4	− 0·8	− 0·5	+ 0·4	+ 0·4	+ 0·3	0·0
21 „ 22	− 0·4	− 1·5	− 1·6	− 0·3	− 0·6	+ 0·6	− 0·8	− 0·5	− 0·8	− 0·5	− 1·4	− 1·5	− 0·8
22 „ 23	− 1·4	− 2·6	− 1·5	+ 0·1	− 0·9	+ 0·2	− 0·8	+ 0·1	− 1·0	− 1·1	− 2·0	− 1·5	− 1·0
23 „ 24	− 1·2	− **3·0**	− 1·0	+ 0·7	− 0·4	+ 0·2	− 0·9	− 0·2	− 1·1	− 1·5	− **2·4**	− 1·8	− 1·0
Range	4·5	6·4	6·3	8·2	6·2	4·2	1·6	1·3	3·9	4·3	4·5	4·0	3·4

Mean Daily Velocities of the North and East Components of the Wind, 1912.

Table VIc.—*Showing the Mean Velocities of the North or South and East or West Components of the Winds which blew on each day of the year 1912.*

In miles per hour.

1912.	Month.																							
	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
Date.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.
1 ..	2·4 N	1·5 E	6·5 N	4·6 W	1·1 N	3·9 W	2·1 N	3·4 W	1·8 N	5·0 W	1·3 S	2·7 W	3·1 S	7·8 W	2·9 S	10·0 W	3·2 S	8·4 W	1·0 S	0·7 W	1·4 N	0·8 W	2·7 N	2·4 E
2	0·9 N	1·4 E	5·1 N	1·8 W	0·0	2·2 W	2·4 N	4·3 W	2·5 N	4·1 W	0·8 N	4·1 W	2·9 S	5·6 W	0·0	11·8 W	3·0 S	5·6 W	5·0 N	3·9 W	1·5 S	0·7 E	2·6 N	3·1 E
3 ..	3·2 N	1·1 E	1·8 N	0·7 W	1·1 N	1·8 W	4·3 N	4·4 W	6·7 N	5·7 W	0·6 N	3·7 W	4·0 S	5·6 W	1·3 S	11·7 W	2·1 S	4·4 W	5·4 N	4·8 W	3·0 N	1·0 W	3·4 N	3·1 E
4 ..	2·4 N	0·6 E	0·4 S	0·7 W	3·2 N	3·3 W	3·4 N	5·4 W	4·3 N	5·0 W	0·6 S	5·1 W	3·9 S	6·7 W	2·9 S	10·7 W	0·5 S	4·7 W	5·2 N	5·4 W	3·7 N	1·2 W	0·8 N	0·9 E
5 ..	2·7 N	0·0	1·4 S	2·1 E	0·6 S	2·7 W	4·4 N	3·0 W	4·1 N	4·6 W	0·5 N	5·9 W	4·4 S	5·9 W	4·0 S	9·5 W	0·2 S	4·8 W	3·4 N	3·4 W	5·1 N	0·5 W	0·9 N	0·3 E
6 ..	4·4 N	0·4 W	1·5 N	0·8 W	0·7 N	2·0 W	3·5 N	5·8 W	1·0 S	5·0 W	0·5 N	5·1 W	3·6 S	5·2 W	3·3 S	8·1 W	3·5 S	1·7 W	3·4 N	2·7 W	3·6 N	0·8 W	4·4 N	0·7 W
7 ..	3·8 N	0·2 W	1·0 N	1·0 W	4·6 N	2·3 W	4·3 N	4·6 W	0·5 N	4·5 W	0·1 S	6·2 W	4·7 S	2·6 W	2·0 S	9·5 W	3·4 S	0·1 E	2·3 N	1·9 W	1·0 N	0·4 E	5·1 N	0·2 E
8 ..	3·4 N	1·2 W	1·2 N	1·4 W	6·0 N	2·4 W	7·4 N	4·5 W	0·3 N	4·3 W	2·1 S	7·2 W	6·8 S	2·9 W	1·9 S	7·8 W	4·0 S	0·3 W	0·1 N	0·3 E	2·3 N	1·4 E	3·4 N	1·5 E
9 ..	3·7 N	1·9 W	2·1 S	0·7 E	4·8 N	3·7 W	6·0 N	5·3 W	0·5 N	4·8 W	3·4 S	5·1 W	0·5 N	14·0 W	3·2 S	7·9 W	2·6 S	0·4 E	1·3 N	0·6 W	3·7 N	0·8 E	1·9 N	2·0 E
10 ..	2·1 N	0·7 W	0·1 N	1·1 W	4·9 N	3·2 W	4·5 N	3·4 W	2·1 N	6·0 W	2·2 S	5·2 W	1·8 S	10·8 W	4·2 S	7·5 W	1·5 S	1·1 W	2·5 N	1·3 W	3·9 N	1·4 E	1·0 N	1·3 E
11 ..	4·0 N	1·5 W	0·2 S	1·2 W	4·8 N	5·0 W	0·7 S	2·8 W	4·4 N	5·1 W	2·1 N	6·6 W	3·2 S	7·7 W	4·2 S	6·4 W	1·1 S	1·4 W	2·3 N	2·4 W	3·5 N	1·4 E	2·1 N	1·5 E
12 ..	5·9 N	0·8 W	2·8 S	0·2 E	5·5 N	3·5 W	1·4 S	3·5 W	0·5 N	4·5 W	5·1 N	4·3 W	3·3 S	10·0 W	4·5 S	4·9 W	1·8 N	2·9 W	3·1 N	2·2 W	4·5 N	2·5 E	3·7 N	0·7 E
13 ..	5·5 N	1·0 W	0·6 S	0·8 W	7·1 N	4·4 W	2·0 N	4·5 W	2·3 S	4·0 W	2·2 N	0·7 W	3·7 S	9·1 W	3·4 S	6·5 W	1·0 N	2·5 W	0·7 N	1·0 E	5·8 N	3·3 E	3·2 N	4·2 E
14 ..	5·9 N	0·2 W	2·4 N	1·1 W	7·6 N	5·1 W	4·0 S	1·7 W	4·1 S	3·4 W	7·4 S	3·2 E	3·8 S	10·8 W	4·2 S	8·5 W	1·8 N	1·5 W	1·8 N	0·0	3·6 N	0·7 E	1·8 N	4·0 E
15 ..	5·1 N	0·7 W	4·4 N	3·3 W	6·2 N	4·3 W	0·5 N	4·9 W	2·9 S	4·4 W	19·2 S	5·6 E	2·2 S	10·1 W	4·2 S	10·8 W	3·8 N	2·1 W	1·2 N	1·0 W	2·1 N	0·0	4·7 N	2·5 E
16 ..	3·0 N	0·4 W	5·0 N	4·0 W	3·7 N	4·1 W	5·2 N	4·1 W	0·3 S	5·8 W	17·7 S	5·9 E	1·2 S	11·1 W	4·1 S	9·9 W	3·8 N	3·4 W	1·2 N	2·6 E	1·2 N	0·1 W	4·0 N	2·9 E
17 ..	1·7 N	1·5 E	4·0 N	3·4 W	1·5 N	3·0 W	2·9 N	4·6 W	1·8 S	3·5 W	13·8 S	7·7 E	3·1 S	8·6 W	2·4 S	8·1 W	4·0 N	2·2 W	0·8 N	0·8 E	4·7 N	0·7 E	3·2 N	2·3 E
18 ..	2·8 N	0·7 W	2·7 N	2·9 W	3·0 N	2·6 W	4·3 N	3·8 W	2·1 S	4·4 W	12·4 S	1·4 E	3·4 S	9·5 W	2·5 S	8·2 W	4·5 N	4·5 W	1·9 N	1·4 E	5·4 N	0·1 W	4·0 N	0·4 E
19 ..	2·4 N	0·2 W	2·1 N	0·9 W	2·4 S	2·1 W	0·2 N	3·4 W	2·3 S	4·2 W	7·3 S	6·0 W	3·1 S	8·6 W	1·8 S	7·1 W	3·7 N	3·7 W	2·7 N	1·2 E	4·7 N	0·3 E	4·5 N	0·7 W
20 ..	3·1 N	0·4 E	4·0 N	0·5 W	2·1 S	1·2 W	0·2 N	3·6 W	2·2 S	5·3 W	5·5 S	5·6 W	4·2 S	11·5 W	0·4 N	7·4 W	2·1 N	4·0 W	2·9 N	1·2 E	2·9 N	3·4 E	3·2 N	1·1 E
21 ..	2·6 N	1·1 W	2·9 N	0·0	1·1 N	2·7 W	3·8 N	5·1 W	3·7 S	4·0 W	3·5 S	9·2 W	3·7 S	17·2 W	1·5 N	7·8 W	1·0 N	2·6 W	4·8 N	4·5 E	1·0 N	4·1 E	0·6 N	1·8 E
22 ..	5·1 N	2·6 W	2·4 N	0·6 W	2·8 N	3·5 W	6·5 N	6·2 W	3·4 S	4·5 W	2·9 S	7·3 W	1·8 S	17·4 W	2·1 N	9·0 W	0·9 S	0·5 E	5·2 N	1·0 E	6·5 S	0·1 E	2·5 N	1·8 E
23 ..	5·4 N	2·3 W	6·6 N	3·8 W	5·8 N	3·8 W	5·5 N	5·4 W	3·0 S	4·3 W	2·7 S	7·0 W	0·3 N	15·6 W	1·3 N	9·5 W	0·4 N	0·6 W	4·5 N	0·2 W	4·3 N	0·2 W	3·4 N	1·7 E
24 ..	5·6 N	2·2 W	6·0 N	4·0 W	0·5 S	1·8 W	6·7 N	4·8 W	2·5 S	4·0 W	2·3 S	6·7 W	0·8 S	11·4 W	0·9 N	6·8 W	3·4 N	1·8 W	0·4 S	0·2 W	3·8 N	1·2 E	2·2 N	1·4 E
25 ..	4·2 N	1·2 W	2·6 N	1·5 W	2·1 S	2·2 W	6·5 N	6·1 W	0·6 N	5·5 W	2·3 S	7·1 W	2·3 S	13·7 W	0·1 N	0·4 E	0·1 N	0·9 W	2·3 S	0·3 W	2·3 N	1·0 E	1·0 N	1·8 E
26 ..	2·1 N	0·3 E	3·0 N	2·6 W	1·2 S	4·0 W	4·7 N	4·9 W	2·0 N	4·5 W	0·7 S	3·7 W	5·9 S	15·0 W	1·5 S	2·8 W	2·2 S	0·1 W	2·1 S	2·2 E	3·8 N	1·6 E	3·0 N	0·1 E
27 ..	2·1 N	1·7 E	3·8 N	4·6 W	0·1 S	3·3 W	4·2 N	6·0 W	2·8 N	5·3 W	2·2 S	3·2 W	3·7 S	16·3 W	0·1 N	7·1 W	0·0	1·7 W	1·7 N	0·1 W	3·4 N	2·8 E	2·4 N	0·4 E
28 ..	1·1 N	0·5 E	4·8 N	4·9 W	2·2 N	5·1 W	2·1 N	4·0 W	1·5 S	2·1 W	0·1 S	5·7 W	4·0 S	16·6 W	2·3 S	8·1 W	1·5 N	1·8 W	1·2 N	1·0 E	4·3 N	7·0 E	1·2 N	1·4 E
29 ..	0·6 S	0·9 E	4·1 N	4·3 W	4·0 N	4·0 W	0·1 S	3·9 W	0·2 S	2·8 W	2·3 S	8·5 W	6·5 S	14·3 W	3·1 S	7·8 W	0·7 S	2·3 W	2·4 N	0·5 E	4·6 N	4·9 E	2·7 N	1·2 E
30 ..	0·4 S	1·6 W			3·2 N	2·2 W	0·9 S	4·0 W	0·5 S	3·8 W	3·8 S	9·2 W	7·2 S	7·4 W	4·5 S	6·7 W	1·9 S	1·9 W	1·8 N	0·1 W	4·0 N	4·5 E	2·2 N	1·0 E
31 ..	2·2 N	1·8 W			0·6 N	3·1 W			1·2 S	3·1 W			4·8 S	7·8 W	3·7 S	8·4 W			3·2 N	1·0 W			3·3 N	0·8 E
Monthly Mean.	3·2 N	0·4 W	2·4 N	1·8 W	2·5 N	3·2 W	3·0 N	4·4 W	0·1 S	4·4 W	3·5 S	3·9 W	3·4 S	10·2 W	2·1 S	7·9 W	0·1 N	2·4 W	2·1 N	0·5 W	3·0 N	1·3 E	2·7 N	1·5 E
Annual Variation.	2·4 N	2·6 E	1·6 N	1·2 E	1·7 N	0·2 W	2·2 N	1·4 W	0·9 S	1·4 W	4·3 S	0·9 W	4·2 S	7·2 W	2·9 S	4·9 W	0·7 S	0·6 E	1·3 N	2·5 E	2·2 N	4·3 E	1·9 N	4·5 E

The Velocities of the Mean Components for the year are 0·8 N and 3·0 W.

TABLE VId.—*Showing the mean diurnal inequality of the Velocity of the North or South and East or West Components of the Wind for each month of the year 1912 and for the whole year.*

In miles per hour.

1912.	Month.																										Year.	
	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.			
Bombay Civil Time Hourly Intervals.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.
0 to 1 ..	1·1 S	1·8 E	0·7 S	1·0 E	0·6 N	0·1 W	0·3 N	1·7 E	0·2 S	1·7 E	0·7 S	1·4 E	0·2 S	0·4 E	0·1 S	0·2 W	0·1 N	0·4 E	0·8 S	2·0 E	0·8 S	1·2 E	0·7 S	0·4 E	0·4 S	1·0 E
1 „ 2 ..	1·2 S	2·3 E	0·6 S	1·2 E	0·7 N	1·1 E	0·0	2·4 E	0·3 S	1·9 E	0·1 N	1·3 E	0·3 S	0·2 W	0·5 N	0·6 W	0·1 N	0·4 E	1·2 S	1·8 E	0·8 S	1·8 E	1·2 S	1·7 E	0·3 S	1·3 E
2 „ 3 ..	1·2 S	2·6 E	0·3 S	2·0 E	0·1 N	2·6 E	0·9 S	3·6 E	0·4 S	2·4 E	0·4 N	1·2 E	0·2 S	0·9 W	0·3 N	0·3 W	0·1 S	1·4 E	1·3 S	1·9 E	1·0 S	2·0 E	1·2 S	2·4 E	0·5 S	1·7 E
3 „ 4 ..	1·0 S	2·6 E	0·7 S	3·0 E	0·1 S	3·2 E	1·4 S	4·2 E	0·6 S	2·8 E	0·9 N	1·2 E	0·2 S	0·9 W	0·1 N	0·4 W	0·7 S	2·4 E	0·8 S	2·6 E	1·0 S	2·7 E	0·7 S	3·8 E	0·5 S	2·3 E
4 „ 5 ..	0·4 S	3·0 E	0·8 S	4·0 E	0·7 S	4·2 E	1·6 S	4·3 E	0·7 S	2·3 E	1·0 N	1·6 E	0·1 N	0·6 W	0·1 S	0·3 W	0·8 S	2·6 E	1·5 S	3·4 E	0·7 S	4·3 E	0·3 S	4·6 E	0·5 S	2·8 E
5 „ 6 ..	0·8 S	3·9 E	0·9 S	5·5 E	0·6 S	5·1 E	1·4 S	5·1 E	1·0 S	2·9 E	0·4 N	2·1 E	0·3 S	0·7 W	0·1 N	0·2 W	1·1 S	3·7 E	1·4 S	3·5 E	1·0 S	5·0 E	0·3 S	4·8 E	0·7 S	3·4 E
6 „ 7 ..	1·2 S	4·2 E	1·4 S	6·2 E	1·0 S	5·5 E	1·9 S	5·5 E	1·0 S	2·9 E	0·8 N	1·8 E	0·0	0·2 W	0·1 N	0·3 W	1·4 S	4·0 E	1·1 S	4·3 E	1·5 S	5·4 E	0·4 S	5·1 E	0·8 S	3·7 E
7 „ 8 ..	1·3 S	4·6 N	1·2 S	6·5 E	1·5 S	6·2 E	1·6 S	4·6 E	0·8 S	2·3 E	0·3 N	2·1 E	0·1 S	0·2 W	0·1 N	0·5 E	2·1 S	4·4 E	1·4 S	4·7 E	1·3 S	5·6 E	0·6 S	5·5 E	1·0 S	3·9 E
8 „ 9 ..	1·0 S	5·0 E	1·0 S	6·2 E	2·1 S	6·2 E	1·5 S	4·2 E	0·7 S	2·1 E	0·3 N	1·5 E	0·5 N	0·1 W	0·1 N	1·0 E	1·7 S	3·4 E	1·2 S	4·4 E	1·4 S	5·4 E	0·8 S	5·3 E	0·9 S	3·7 E
9 „ 10 ..	1·2 S	5·1 E	0·8 S	5·1 E	2·1 S	4·5 E	1·5 S	2·4 E	0·5 S	1·0 E	0·5 N	0·6 E	0·7 N	0·5 W	0·1 S	1·1 E	1·5 S	3·4 E	0·9 S	2·9 E	1·5 S	5·0 E	1·1 S	5·0 E	0·8 S	3·0 E
10 „ 11 ..	1·1 S	3·6 E	0·1 S	2·4 E	2·0 S	0·9 E	1·2 S	0·7 W	0·7 S	0·1 E	0·1 N	0·1 W	0·2 S	0·7 E	0·0	0·7 E	1·7 S	1·8 E	1·0 S	1·5 E	1·5 S	3·9 E	1·5 S	4·0 E	0·9 S	1·6 E
11 „ 12 ..	0·9 S	0·6 E	0·1 N	1·5 W	1·1 S	2·0 W	0·9 S	2·7 W	0·7 S	1·2 W	0·7 S	1·2 W	0·4 S	1·1 E	0·6 S	0·4 E	0·8 S	0·4 W	0·4 S	1·8 W	1·6 S	1·5 E	1·9 S	1·6 E	0·8 S	0·5 W
12 „ 13 ..	0·7 S	2·3 W	0·2 N	4·5 W	0·6 S	4·3 W	0·2 S	4·2 W	0·3 S	2·4 W	0·8 S	2·0 W	0·1 S	0·1 E	0·2 S	0·1 E	0·2 S	2·6 W	0·1 S	3·1 W	1·7 S	0·7 W	1·4 S	0·9 W	0·5 S	2·2 W
13 „ 14 ..	0·4 S	4·5 W	0·3 N	5·6 W	0·1 N	5·1 W	0·6 N	5·0 W	0·1 S	3·1 W	0·5 S	2·1 W	0·7 S	0·7 E	0·4 S	0·0	0·3 N	3·7 W	0·6 N	4·1 W	1·2 S	3·0 W	1·1 S	2·3 W	0·2 S	3·1 W
14 „ 15 ..	0·1 N	5·5 W	0·7 N	6·2 W	0·7 N	5·6 W	1·5 N	5·6 W	0·1 N	4·1 W	0·1 N	2·9 W	0·5 S	0·1 W	0·2 S	0·5 W	0·9 N	5·1 W	1·2 N	5·5 W	0·6 S	5·3 W	0·7 S	5·3 W	0·3 N	4·3 W
15 „ 16 ..	1·1 N	5·8 W	0·8 N	6·5 W	1·6 N	5·7 W	1·6 N	5·9 W	1·0 N	3·8 W	0·7 S	2·3 W	0·3 N	0·6 W	0·2 N	0·8 W	1·0 N	4·8 W	1·7 N	6·1 W	0·2 N	6·7 W	0·1 N	6·2 W	0·7 N	4·6 W
16 „ 17 ..	1·6 N	5·8 W	1·0 N	6·2 W	2·1 N	5·4 W	1·9 N	5·3 W	1·1 N	3·7 W	0·1 N	2·0 W	0·4 N	0·5 W	0·2 N	0·4 W	1·7 N	4·3 W	2·1 N	5·6 W	1·5 N	6·3 W	1·0 N	6·6 W	1·2 N	4·3 W
17 „ 18 ..	2·1 N	5·4 W	1·5 N	5·3 W	2·0 N	4·6 W	2·1 N	4·2 W	1·2 N	3·1 W	0·4 N	1·8 W	0·2 N	0·4 W	0·1 N	0·4 W	2·1 N	2·8 W	2·8 N	4·3 W	3·1 N	6·0 W	1·9 N	6·2 W	1·6 N	3·7 W
18 „ 19 ..	2·4 N	4·7 W	1·4 N	4·3 W	1·5 N	3·5 W	2·0 N	2·7 W	1·8 N	2·0 W	0·1 N	1·2 W	0·2 N	0·4 W	0·3 N	0·3 W	1·5 N	1·8 W	2·3 N	2·9 W	3·9 N	5·7 W	3·2 N	5·5 W	1·7 N	2·9 W
19 „ 20 ..	2·7 N	4·0 W	1·8 N	3·0 W	1·5 N	2·3 W	1·7 N	1·4 W	1·4 N	1·2 W	0·4 S	0·6 W	0·2 N	0·3 W	0·1 S	0·3 W	1·2 N	1·2 W	1·9 N	2·1 W	4·0 N	5·2 W	3·3 N	4·8 W	1·6 N	2·2 W
20 „ 21 ..	2·5 N	2·5 W	1·1 N	1·9 W	0·7 N	0·7 W	0·8 N	0·1 E	1·0 N	0·2 E	0·7 S	0·3 W	0·1 N	0·1 W	0·1 N	0·6 E	0·9 N	0·4 W	1·3 N	0·7 W	3·2 N	3·5 W	2·7 N	3·6 W	1·1 N	1·1 W
21 „ 22 ..	1·1 N	1·0 W	0·6 N	0·4 W	0·3 S	0·4 E	0·2 N	0·2 E	0·2 N	1·0 E	0·6 S	0·3 E	0·4 N	0·3 E	0·2 S	0·3 E	0·8 N	0·1 W	0·0	0·6 E	1·7 N	1·3 W	1·2 N	1·7 W	0·4 N	0·1 W
22 „ 23 ..	0·0	0·3 E	0·3 S	1·0 E	0·4 S	0·4 E	0·8 N	0·1 W	0·1 N	1·0 E	0·1 S	0·3 E	0·1 N	1·5 E	0·2 N	0·4 W	0·5 N	0·4 W	0·4 S	0·9 E	0·5 N	0·5 W	0·9 N	0·7 W	0·2 N	0·3 W
23 „ 24 ..	0·1 S	1·3 E	0·8 S	1·0 E	0·3 N	0·1 W	0·8 N	0·1 W	0·2 S	0·9 E	0·2 S	0·6 E	0·1 N	1·2 E	0·1 N	0·1 E	0·3 N	0·1 E	0·3 S	1·0 E	0·9 S	0·4 E	0·1 N	0·4 W	0·1 S	0·5 E

Aggregate and Mean Velocities and relative Frequency of Different Winds, 1912.

TABLE VIe.—*Showing for the year 1912 the sums of the Velocities, and the Mean Velocities, in miles per hour, of the Winds which blew in each month, from each of the sixteen Principal Directions and also the number of hourly Observations which those sums comprise, the latter numbers indicating the Relative Frequency of the same Wind (as to direction) in the several Months, and of different Winds during the same month.*

1912.	N.			N. N. E.			N. E.			E. N. E.			E.			E. S. E.			S. E.			S. S. E.		
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.
January ..	216	46	4·7	235	59	4·0	254	65	3·9	840	171	4·9	103	21	4·9	130	33	3·9	33	12	2·7	7	2	3·5
February ..	68	16	4·2	249	67	3·7	128	35	3·7	374	74	5·1	136	29	4·7	228	32	7·1	95	15	6·3	24	6	4·0
March ..	144	26	5·5	183	51	3·6	110	30	3·7	163	31	5·3	54	10	5·4	185	32	5·8	67	12	5·6	45	10	4·5
April ..	78	15	5·2	185	47	3·9	55	16	3·4	59	15	3·9	32	8	4·0	52	12	4·3	33	10	3·3	62	14	4·4
May ..	24	6	4·0	37	9	4·1	16	5	3·2	29	9	3·2	0	0	0·0	39	4	9·7	26	4	6·5	32	6	5·3
June ..	0	0	0·0	33	9	3·7	24	5	4·8	27	5	5·4	15	4	3·7	174	17	10·2	139	13	10·7	1,165	72	16·2
July ..	0	0	0·0	10	1	10·0	0	0	0·0	13	1	13·0	0	0	0·0	0	0	0·0	40	2	20·0	69	4	17·2
August ..	0	0	0·0	0	0	0·0	12	2	6·0	10	2	5·0	28	6	4·7	14	4	3·5	16	3	5·3	5	2	2·5
September ..	2	1	2·0	70	26	2·7	63	16	3·9	84	18	4·7	71	17	4·2	177	35	5·1	253	37	6·8	245	50	4·9
October ..	61	20	3·0	138	39	3·5	180	39	4·6	587	115	5·1	221	61	3·6	237	49	4·8	233	45	5·2	30	8	3·7
November ..	217	43	5·0	286	66	4·3	293	61	4·8	1458	212	6·9	182	31	5·9	193	30	6·4	109	11	9·9	95	7	13·6
December ..	185	38	4·9	203	53	3·8	174	43	4·0	1491	234	6·4	305	47	6·5	265	55	4·8	26	7	3·7	0	0	0·0
Year ..	995	211	4·7	1629	427	3·8	1309	317	4·1	5135	887	5·8	1,147	234	4·9	1694	303	5·6	1,070	171	6·3	1,779	181	9·8

1912.	S.			S. S. W.			S. W.			W. S. W.			W.			W. N. W.			N. W.			N. N. W.			Number of Observations.	
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Calm.	Variable.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.		
January ..	0	0	0·0	16	3	5·3	6	2	3·0	43	8	5·4	111	21	5·3	434	76	5·7	1,099	135	8·1	638	89	7·2	1	0
February ..	7	2	3·5	15	6	2·5	7	3	2·3	72	16	4·5	376	83	4·5	1,081	150	7·2	924	102	9·1	347	55	6·3	5	0
March ..	75	18	4·2	96	19	5·1	65	17	3·8	121	27	4·5	544	84	6·5	1,218	153	8·0	1,320	152	8·7	433	72	6·0	0	0
April ..	75	13	5·8	98	24	4·1	50	20	2·5	202	49	4·1	397	61	6·5	1,537	166	9·3	1,665	183	9·1	511	66	7·7	1	0
May ..	32	6	5·3	232	40	5·8	408	88	4·6	924	178	5·2	899	157	5·7	1,014	155	6·5	434	54	8·0	136	20	6·8	3	0
June ..	467	31	15·1	287	36	8·0	271	37	7·3	1,867	246	7·6	994	136	7·3	530	87	6·1	63	11	5·7	90	10	9·0	0	1
July ..	23	3	7·7	165	28	5·9	863	105	8·2	4,568	411	11·1	2,666	180	14·8	119	8	14·9	0	0	0·0	10	1	10·0	0	0
August ..	5	1	5·0	96	14	6·9	543	82	6·6	3,307	360	9·2	2,112	215	9·8	397	44	9·0	21	5	4·2	17	4	4·2	0	0
September ..	87	20	4·3	89	23	3·9	56	15	3·7	674	132	5·1	436	83	5·3	877	139	6·3	554	82	6·8	114	26	4·4	0	0
October ..	23	9	2·6	26	7	3·7	16	6	2·7	55	14	3·9	64	14	4·6	666	101	6·6	1,116	153	7·3	391	64	6·1	0	0
November ..	25	1	25·0	28	3	9·3	0	0	0·0	32	6	5·3	165	29	5·7	352	56	6·3	514	71	7·2	760	92	8·3	1	0
December ..	0	0	0·0	4	1	4·0	0	0	0·0	22	7	3·1	79	18	4·4	377	77	4·9	481	70	6·9	669	94	7·1	0	0
Year ..	819	104	7·9	1,152	204	5·6	2,285	375	6·1	11,887	1,454	8·2	8,843	1,081	8·2	8,602	1,212	7·1	8,191	1,018	8·0	4,116	593	6·9	11	1

Velocity of Wind, 1912.

Dines's Anemograph.

Table VIf.—*Mean Velocity of the Wind in miles per hour, for each day of Bombay Civil Time, also the mean monthly velocity and its variation from the mean of the year.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	5·7	7·8	5·3	5·4	5·0	4·3	7·2	9·0	8·0	4·7	4·3	4·7
2 ..	4·8	6·2	5·1	5·6	5·5	3·7	5·7	10·1	6·1	7·9	5·5	4·9
3 ..	5·2	4·5	4·5	7·1	9·6	4·0	6·5	10·6	5·0	8·3	6·1	5·7
4 ..	4·2	3·4	6·2	6·0	7·6	4·6	7·1	9·6	4·2	7·5	5·2	2·9
5 ..	4·2	5·0	4·9	6·7	6·2	5·4	7·2	8·8	4·4	5·6	6·5	3·5
6 ..	5·6	4·1	6·0	6·6	5·0	4·9	6·1	7·7	4·9	5·0	4·8	6·0
7 ..	5·4	3·9	7·5	6·9	4·2	5·6	5·7	8·5	5·7	3·6	3·2	5·6
8 ..	3·6	3·1	6·6	8·5	4·2	6·8	11·7	7·1	5·1	4·6	5·3	4·7
9 ..	4·2	4·6	5·9	7·7	4·7	5·8	12·9	7·4	4·2	4·3	5·4	4·2
10 ..	5·5	3·0	5·9	6·4	6·4	5·3	9·9	7·5	3·7	4·1	6·4	2·9
11 ..	5·3	3·8	7·1	4·3	7·6	6·6	7·3	7·3	4·5	4·5	5·6	4·8
12 ..	6·8	4·8	6·7	3·7	4·8	7·5	9·4	6·0	4·5	4·2	6·8	6·0
13 ..	6·1	4·9	8·0	5·7	5·2	6·2	8·4	6·5	4·1	3·2	7·3	8·0
14 ..	6·2	5·3	8·6	5·4	5·8	9·4	10·0	8·5	5·7	3·7	3·7	7·1
15 ..	6·3	7·5	7·3	7·9	5·0	20·8	9·4	9·9	5·5	3·3	3·9	6·0
16 ..	4·0	7·2	5·4	7·6	5·2	19·6	10·2	9·2	6·5	5·8	3·8	6·7
17 ..	4·3	5·7	4·7	6·7	4·1	16·5	8·0	7·5	6·7	4·7	6·2	5·9
18 ..	4·5	4·7	5·1	6·8	4·5	13·5	8·7	7·2	6·5	4·2	6·9	5·1
19 ..	3·7	4·2	4·0	4·7	4·7	10·5	8·1	6·2	5·4	4·5	6·0	5·1
20 ..	4·1	5·2	5·3	6·0	5·5	8·4	11·5	6·5	4·7	5·1	6·1	4·5
21 ..	3·7	4·1	4·6	7·1	5·1	8·3	16·4	7·0	6·4	7·9	6·8	3·9
22 ..	6·3	4·0	5·5	9·4	5·3	6·7	15·7	8·3	4·3	6·2	11·9	5·1
23 ..	6·4	7·6	7·3	8·6	4·8	6·2	13·4	9·0	4·5	5·9	5·2	5·1
24 ..	6·7	7·2	5·2	8·4	4·7	6·0	9·5	6·6	5·1	4·1	5·1	4·5
25 ..	5·2	4·7	3·5	8·9	5·4	6·2	11·9	3·8	3·7	3·2	3·7	3·1
26 ..	4·5	4·4	4·0	7·7	6·1	3·6	14·0	4·1	4·1	3·6	5·0	5·0
27 ..	4·5	6·1	3·3	8·0	5·9	5·2	14·2	6·1	3·4	4·3	5·4	3·6
28 ..	3·5	6·8	4·7	5·9	6·2	7·5	14·9	7·5	3·0	3·7	8·7	4·5
29 ..	4·2	7·4	7·1	4·1	5·5	8·3	13·5	7·3	3·2	4·4	7·0	5·0
30 ..	3·9		4·2	4·3	3·7	8·6	9·5	7·6	2·7	5·0	6·9	4·0
31 ..	3·9		4·9		3·2		8·1	8·2		5·0		4·9
Monthly Mean.	4·9	5·2	5·6	6·6	5·4	7·9	10·1	7·6	4·9	4·9	5·8	4·9
Annual Variation.	− 1·2	− 0·9	− 0·5	+ 0·5	− 0·7	+ 1·8	+ 4·0	+ 1·5	− 1·2	− 1·2	− 0·3	− 1·2

Table VIg.—*Showing the mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year 1912 and for the whole year.*

1912. Bombay Civil Time Hourly Intervals	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1	− 2·1	− 2·0	− 0·6	− 0·4	− 0·6	− 0·1	− 0·1	+ 0·3	− 1·0	− 1·0	− 1·3	− 1·5	− 0·9
1 „ 2	− 2·0	− 2·0	− 1·2	− 1·3	− 1·3	− 0·3	+ 0·1	+ 0·5	− 1·1	− 1·1	− 0·8	− 1·1	− 1·0
2 „ 3	− 1·6	− 2·0	− 1·9	− 2·4	− 1·8	− 0·7	+ 0·4	+ 0·4	− 1·1	− 1·3	− 0·9	− 0·8	− 1·1
3 „ 4	− 1·5	− 1·9	− 2·2	− 2·8	− 2·2	− 0·8	+ 0·3	+ 0·4	− 0·9	− 1·2	− 0·5	+ 0·3	− 1·1
4 „ 5	− 1·1	− 1·4	− 2·1	− 3·1	− 2·2	− 1·0	+ 0·1	+ 0·3	− 0·8	− 1·1	+ 0·2	+ 0·9	− 0·9
5 „ 6	− 0·7	− 1·3	− 2·1	− 3·5	− 2·3	− 1·1	+ 0·3	− 0·1	− 1·1	− 0·9	+ 1·0	+ 1·0	− 0·9
6 „ 7	− 0·9	− 0·7	− 1·8	− 3·4	− 2·5	− 1·2	− 0·4	+ 0·3	− 0·7	− 0·6	+ 1·4	+ 1·2	− 0·8
7 „ 8	− 0·3	− 0·5	− 1·4	− 3·2	− 1·9	− 1·7	− 0·5	− 0·3	+ 0·2	− 0·5	+ 1·9	+ 1·5	− 0·6
8 „ 9	− 0·1	+ 0·2	− 1·2	− 2·8	− 1·5	− 1·9	− 0·6	− 0·3	+ 0·4	− 0·8	+ 1·3	+ 1·4	− 0·5
9 „ 10	+ 0·2	+ 0·1	− 1·7	− 2·3	− 1·1	− 2·0	− 0·2	− 0·4	− 0·6	− 0·9	+ 0·5	+ 0·9	− 0·6
10 „ 11	− 0·6	− 0·3	− 0·9	− 1·0	− 0·4	− 1·1	− 0·7	− 0·5	− 0·6	− 1·3	− 0·6	0·0	− 0·7
11 „ 12	− 0·8	+ 0·2	+ 0·5	+ 0·9	+ 0·6	+ 0·2	− 0·2	0·0	− 0·9	− 0·6	− 1·2	− 1·3	− 0·2
12 „ 13	− 0·1	+ 1·8	+ 2·1	+ 2·3	+ 1·6	+ 1·0	+ 0·6	− 0·2	+ 0·4	+ 0·4	− 1·6	− 1·7	+ 0·5
13 „ 14	+ 0·9	+ 2·4	+ 3·0	+ 3·2	+ 2·2	+ 1·2	+ 0·3	− 0·1	+ 1·4	+ 1·5	− 1·2	− 1·5	+ 1·1
14 „ 15	+ 1·7	+ 2·6	+ 3·5	+ 4·0	+ 2·9	+ 1·6	+ 0·9	+ 0·3	+ 2·1	+ 2·2	− 0·2	− 0·5	+ 1·8
15 „ 16	+ 2·4	+ 3·1	+ 3·8	+ 4·3	+ 3·1	+ 1·7	+ 0·3	+ 0·5	+ 2·1	+ 2·6	+ 0·6	+ 0·4	+ 2·1
16 „ 17	+ 2·6	+ 3·2	+ 3·6	+ 4·0	+ 3·0	+ 2·0	+ 0·7	+ 0·3	+ 1·9	+ 2·5	+ 1·1	+ 1·0	+ 2·2
17 „ 18	+ 2·5	+ 2·5	+ 2·9	+ 3·3	+ 2·6	+ 1·3	+ 0·9	+ 0·1	+ 1·6	+ 2·0	+ 1·8	+ 1·6	+ 1·9
18 „ 19	+ 2·3	+ 1·7	+ 1·8	+ 2·1	+ 2·1	+ 0·4	0·0	0·0	+ 0·6	+ 1·8	+ 2·1	+ 1·8	+ 1·4
19 „ 20	+ 2·1	+ 0·9	+ 1·1	+ 1·3	+ 0·8	+ 0·6	− 0·3	0·0	+ 0·4	+ 1·3	+ 1·7	+ 1·5	+ 0·9
20 „ 21	+ 1·1	− 0·2	− 0·6	0·0	+ 0·2	+ 0·3	− 0·4	− 0·7	− 0·2	+ 0·3	+ 0·6	+ 0·2	0·0
21 „ 22	− 0·6	− 1·2	− 1·5	− 0·1	− 0·5	+ 0·5	− 0·6	− 0·3	− 0·8	− 0·5	− 1·2	− 1·4	− 0·7
22 „ 23	− 1·4	− 2·4	− 1·7	+ 0·4	− 0·7	+ 0·1	− 0·6	− 0·1	− 0·9	− 1·2	− 1·9	− 1·3	− 1·0
23 „ 24	− 1·5	− 2·9	− 1·0	+ 0·6	− 0·4	+ 0·2	− 0·7	0·0	− 1·1	− 1·2	− 2·2	− 1·4	− 1·0
Range.	4·7	6·1	6·0	7·8	5·6	4·0	1·6	1·2	3·2	3·9	4·3	3·5	3·3

	Miles.
The mean velocity for June to August ..	8·5
The mean velocity for September to May ..	5·4
The mean velocity for the year ..	6·1

Temperature of the Ground, 1912.

TABLE VIIa.—*Showing for each month the Mean Temperature of the Ground in the thermometer shed and its annual variation at the respective depths of 1, 9, 20, 60 and 132 inches below the surface.*

Depth.	1 Inch.		9 Inches.		20 Inches.		60 Inches.		132 Inches.	
Month.	Mean Temperature	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.
	°	°	°		°	°	°	°	°	°
January ..	78·3	−4·2	78·5		81·5	−2·8	84·2	−0·9	84·1	−0·3
February	78·7	−3·8	78·8		**81·2**	−3·1	**83·4**	−1·7	83·7	−0·7
March ..	81·4	−1·1	80·6		82·3	−2·0	83·4	−1·7	**83·6**	−0·8
April ..	85·9	+3·4	84·4		85·2	+0·9	84·5	−0·6	83·9	−0·5
May ..	**87·6**	+5·1	86·4		87·2	+2·9	86·1	+1·0	84·4	0·0
June ..	86·5	+4·0	86·3		**88·0**	+3·7	**87·3**	+2·2	85·0	+0·6
July ..	83·3	+0·8	84·1		86·5	+2·2	87·1	+2·0	**85·1**	+0·7
August ..	82·0	−0·5	82·6		84·9	+0·6	85·8	+0·7	84·9	+0·5
September	82·8	+0·3	82·4		84·3	0·0	84·9	−0·2	84·6	+0·2
October	83·7	+1·2	*		85·0	+0·7	85·0	−0·1	84·5	+0·1
November	81·1	−1·4			84·0	−0·3	85·0	−0·1	84·5	+0·1
December	**78·2**	−4·3			81·7	−2·6	84·0	−1·1	84·1	−0·3
Year ..	82·5				84·3		85·1		84·4	

TABLE VIIb.—*Showing for each of the five observation hours and for the mean of the day, the Temperature of the Ground exposed to the direct rays of the sun at the depths of 1 and 8 inches below the surface.*

Depth from Surface.	1 Inch.						8 Inches.					
Month.	Observation Hours.					Mean of five observation hours.	Observation Hours.					Mean of five observation hours.
	6	10	14	16	22		6	10	14	16	22	
	°	°	°	°	°	°	°	°	°	°	°	°
January ..	74·0	86·4	113·5	99·3	80·1	90·6	79·3	78·8	79·5	80·2	80·9	79·9
February	76·8	85·0	116·2	113·9	82·6	94·9	82·6	81·8	82·6	83·7	84·7	83·1
March ..	78·7	86·9	118·2	116·0	85·4	97·1	88·0	86·9	88·3	89·9	91·0	88·8
April ..	85·0	93·8	118·6	115·9	90·7	100·8	94·9	93·8	95·5	97·3	98·2	96·0
May ..	88·7	97·0	115·5	112·6	93·4	**101·4**	99·9	98·8	100·5	102·2	103·2	**100·9**
June ..	85·4	90·9	100·8	99·1	88·6	93·0	94·6	93·7	95·3	96·5	97·5	95·5
July ..	80·6	83·3	88·1	86·6	82·2	84·2	85·1	84·6	85·9	86·6	87·2	85·9
August ..	79·0	83·3	89·8	87·6	82·1	**84·0**	84·0	83·5	84·8	85·8	86·5	84·9
September	80·9	86·4	102·7	100·9	83·8	91·0	86·5	85·9	88·1	89·7	90·0	88·0
October ..	81·6	90·0	110·4	104·0	87·1	94·6	87·8	87·2	88·5	89·6	90·2	88·5
November	76·9	87·5	105·5	95·3	82·2	89·5	82·8	82·2	82·9	83·7	84·2	83·2
December	72·2	83·6	106·3	90·7	76·8	85·9	77·0	76·5	77·6	78·5	79·0	**77·7**
Year ..	80·0	87·8	107·1	101·8	84·6	92·2	86·9	86·1	87·5	88·6	89·4	87·7

* This thermometer was found broken and was replaced by a new one in March 1914.

Maxima and Minima of different Meteorological Elements, 1912.

TABLE VIII.—*In which are collected the individual observations in each month of the year, which showed the greatest and least values of the following elements, viz,, Height of Barometer (corrected for Temperature), Temperature of Air, Pressure of Vapour, Additional Capacity of Air and Ground temperatures, 1 inch and 8 inches below the surface (exposed to solar rays.)*

1912.	Height of Barometer.			Temperature of Air.			Pressure of Vapour.			Additional Capacity.			Ground Thermometer 1 inch deep.			Ground Thermometer 8 inches deep.		
Month.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.
	In.	In.	In.	°	°	°	In.	In.	In.	In.	In.	In.	°	°	°	°	°	°
January ..	30·119	29·869	0·250	90·5	65·8	24·7	0·844	0·359	0·485	0·935	0·060	0·875	117·8	69·5	48·3	83·7	76·4	7·3
February ..	·087	·761	·326	88·4	66·8	21·6	·847	·326	·521	·921	·075	·846	121·5	71·0	50·5	87·3	78·4	8·9
March ..	·043	·738	·305	89·6	70·9	18·7	·923	·419	·504	·787	·056	·731	122·0	74·5	47·5	94·7	83·8	10·9
April ..	29·989	·678	·311	90·8	76·3	14·5	1·076	·601	·475	·773	·087	·686	121·6	80·5	41·1	101·3	90·3	11·0
May ..	·919	·650	·269	92·2	79·1	13·1	·051	·716	·335	·708	·123	·585	120·9	84·5	36·4	105·4	94·7	10·7
June ..	·828	·431	·397	93·4	75·5	17·9	·059	·808	·251	·570	·044	·526	115·0	75·0	40·0	106·2	83·3	22·9
July ..	·747	·361	·386	87·6	74·9	12·7	·016	·787	·229	·330	·025	·305	96·0	74·0	22·0	92·7	77·8	14·9
August ..	·843	·543	·300	85·2	75·0	10·2	0·982	·762	·220	·312	·033	·279	99·0	75·8	23·2	89·0	79·8	9·2
September ..	·948	·612	·336	87·5	75·4	12·1	1·059	·727	·332	·409	·049	·360	112·0	76·5	35·5	94·5	82·1	12·4
October ..	·973	·746	·227	91·9	74·1	17·8	·018	·421	·597	·978	·041	·937	116·0	75·0	41·0	92·9	83·3	9·6
November ..	30·029	·682	·347	91·6	68·8	22·8	0·937	·448	·489	·844	·040	·804	114·0	70·0	44·0	88·3	74·5	13·8
December ..	·100	·817	·283	86·1	68·4	17·7	·835	·387	·448	·762	·085	·677	112·0	69·8	42·2	80·3	74·9	5·4
Year ..	30·119	29·361	0·758	93·4	65·8	27·6	1·076	0·326	0·750	0·978	0·025	0·953	122·0	69·5	52·5	106·2	74·5	31·7

Relative Humidity of the Air, 1912.

TABLE IXa.—*Daily and monthly means of observations taken at 6, 10, 14, 16 and 22 hours, daily.*

Complete Saturation=1·000.

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	0·646	0·587	0·705	0·729	0·732	0·717	0·794	0·841	**0·895**	0·764	0·729	0·644
2	·627	**·542**	·680	·744	·735	·724	·791	·848	·873	·699	·802	·637
3	·694	·673	·688	**·804**	·769	·722	·813	·885	·833	·724	·801	·674
4	·661	·731	·639	·782	**·653**	·717	·843	·869	·795	·781	·788	·696
5	·665	·724	**·583**	·706	·716	·712	·800	·878	·785	·780	·789	**·754**
6	·598	·742	·654	·670	·778	·706	·874	·853	·810	·806	·734	·711
7	·645	·752	·671	**·621**	·730	**·703**	·862	·874	·837	·856	·668	·663
8	·740	·774	·615	·625	·736	·717	·896	**·931**	·787	·844	·630	·731
9	·799	·752	·703	·628	·712	·709	·854	·924	·771	·871	·617	·699
10	·742	·720	·681	·695	·752	·722	·819	·861	·764	·855	·595	·731
11	·617	·721	·682	·771	·772	·707	·821	·852	·769	·840	·609	·696
12	·614	·696	·619	·767	·772	·746	·794	·846	·765	**·878**	·583	·634
13	·635	·672	·610	·695	·746	·842	**·789**	·835	·757	·786	**·542**	**·516**
14	**·568**	·687	·597	·795	·740	·774	·811	·858	·772	·798	·606	·583
15	·575	·728	·713	·752	·722	·762	·798	·850	**·755**	·814	·703	·679
16	·688	·706	·724	·727	·733	·823	·907	·854	·781	·758	·747	·651
17	·681	**·789**	·721	·756	·726	·915	·869	·850	·791	·768	·709	·655
18	·727	·765	·743	·690	·726	**·920**	·862	·838	·781	·691	·650	·714
19	·683	·718	·805	·788	·711	·884	·909	·830	·821	·670	·641	·711
20	·611	·659	·811	·772	·665	·911	·942	·855	·820	·632	·599	·741
21	·672	·563	·736	·700	·666	·851	**·949**	·858	·838	**·473**	·805	·728
22	·748	·636	·768	·721	·664	·820	·866	·821	·859	·603	**·910**	·731
23	·804	·619	·731	·753	·665	·801	·846	·821	·841	·665	·812	·694
24	·679	·693	·733	·686	·669	·794	·854	·819	·826	·771	·692	·648
25	·645	·733	**·814**	·676	·673	·782	·862	·874	·805	·834	·675	·697
26	·692	·727	·753	·731	·705	·783	·843	·828	·825	·867	·706	·754
27	·632	·758	·737	·714	·705	·841	·838	**·787**	·809	·850	·668	·707
28	·622	·715	·691	·748	·737	·853	·909	·828	·822	·724	·599	·648
29	·725	·737	·711	·744	**·791**	·866	·886	·834	·810	·751	·584	·666
30	**·809**		·661	·714	·772	·806	·853	·885	·760	·742	·594	·702
31	·754		·745		·727		·833	·824		·741		·735
Monthly Mean.	**0·677**	0·701	0·701	0·723	0·723	0·788	**0·851**	0·851	0·805	0·762	0·686	0·685
Annual Variation.	− ·069	− ·045	− ·045	− ·023	− ·023	+ ·042	+ ·105	+105	+ ·059	+ ·016	− ·060	− ·061

Annual Mean ..0·746

Extent of cloudy Sky, 1912.

TABLE IXb.—*Daily and monthly means of observations taken at 6, 10, 14, 16 and 22 hours daily, the whole sky being reckoned as 10·0.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	4·4	1·0	..	1·6	1·2	7·0	**6·6**	**9·2**	1·6	0·6	..
2	1·4	..	**5·6**	0·6	3·2	**1·0**	7·0	8·2	9·2	**0·2**	1·0	..
3	3·4	..	1·8	1·6	**0·6**	4·6	8·6	**10·0**	8·0	3·4	0·8	..
4	..	5·0	0·2	3·6	4·8	4·8	7·2	9·8	3·6	2·4	..	2·0
5	0·8	**5·4**	0·8	2·4	2·4	5·8	8·0	8·8	7·0	6·2	2·0	2·4
6	0·2	1·0	0·8	0·6	0·8	3·8	9·8	6·6	8·0	3·8	1·2	2·4
7	..	1·8	1·4	1·4	1·0	2·4	9·0	9·2	7·0	**9·0**	1·4	3·6
8	..	4·6	..	..	1·6	2·6	8·8	10·0	5·2	8·6	..	..
9	1·2	2·0	..	0·6	2·4	4·0	9·6	9·0	1·8	8·0	..	0·2
10	2·4	1·2	1·6	1·0	2·0	4·0	7·2	8·0	3·6	6·0	..	2·8
11	..	0·4	4·0	4·0	2·4	7·2	8·0	8·6	6·6	4·0	..	1·8
12	1·0	0·4	0·4	4·0	3·0	**10·0**	8·6	9·6	5·6	2·0	..	..
13	2·0	2·4	..	**6·0**	4·2	10·0	5·6	9·0	2·6	7·0	..	..
14	1·4	1·8	..	5·4	3·4	6·6	**4·4**	9·4	2·0	1·4	3·0	..
15	0·2	0·8	..	1·6	4·6	6·8	6·0	9·6	3·4	1·0	2·0	1·6
16	0·4	0·2	1·0	2·4	4·6	5·4	9·6	9·0	4·4	2·6	2·8	0·6
17	3·0	0·8	0·6	1·0	3·0	9·6	8·6	7·6	1·8	1·0	5·0	3·0
18	4·0	0·2	..	1·2	3·6	10·0	9·2	7·6	**1·4**	3·4	2·4	4·0
19	2·6	..	0·6	1·2	3·0	9·8	9·8	8·8	7·8	2·8	3·6	2·4
20	2·6	..	1·6	2·0	3·2	10·0	**10·0**	8·2	6·6	5·6	6·0	3·0
21	..	0·4	..	2·4	2·8	8·4	10·0	8·0	8·6	4·4	**10·0**	**4·2**
22	..	..	0·4	4·0	4·0	4·6	10·0	8·8	7·8	0·6	10·0	1·0
23	3·2	..	..	4·0	4·4	4·2	9·8	8·8	2·4	5·0	3·4	3·0
24	2·6	1·2	0·4	6·0	4·4	5·8	9·6	8·6	2·0	5·6	1·2	1·0
25	3·0	..	4·4	3·0	1·6	4·6	9·6	8·8	5·0	5·6	..	..
26	4·4	..	2·0	..	2·0	5·0	10·0	7·6	3·6	9·0	..	..
27	4·4	0·4	1·8	1·2	6·4	6·0	10·0	7·8	5·0	4·0	0·2	..
28	5·4	1·6	2·4	2·0	7·0	8·6	10·0	8·8	4·0	5·6	..	..
29	4·6	0·6	..	3·2	6·4	9·4	10·0	8·4	4·4	3·0	..	..
30	**6·0**		..	2·2	**7·2**	7·0	7·4	8·6	3·4	2·4	3·6	..
31	3·2		3·0		4·2		6·8	7·2		1·0		..
Monthly Mean.	2·0	1·3	1·2	2·3	3·4	6·1	**8·6**	8·5	5·0	4·1	2·0	1·3
Annual Variation.	− 1·8	− 2·5	− 2·6	− 1·5	− 0·4	+ 2·3	+ 4·8	+ 4·7	+ 1·2	+ 0·3	− 1·8	− 2·5

For the days which have no entry, 0·0 is to be understood.

Mean of the months from January to April, November and December .. 1·7

Mean of the months from May to October 5·9

Mean for the year .. 3·8

TABLE X.—*Five-day Means, 1912.*

Number of Five-day Period.	Barometric Pressure.	Temperature of the air.	Pressure of Vapour.	Additional Capacity of the air.	* Rainfall.	North or South Component of Wind.	East or West Component of Wind.	Number of five-day Period.	Barometric Pressure.	Temperature of the air.	Pressure of Vapour.	Additional Capacity of the air.	* Rainfall.	North or South Component of Wind.	East or West Component of Wind.
	In.	°	In.	In.	In.	Miles.	Miles.		In.	°	In.	In.	In.	Miles.	Miles.
1 ..	29·956	76·4	0·622	0·296	..	2·3 N	0·9 E	38 ..	29·585	81·5	0·933	0·143	2·65	3·8 S	6·1 W
2 ..	·940	74·5	·613	·247	..	3·5 N	0·9 W	39 ..	·654	83·5	·938	·211	0·71	3·2 S	9·7 W
3 ..	·964	72·9	·499	·318	..	5·3 N	0·8 W	40 ..	·649	81·3	·931	·139	6·20	2·6 S	9·6 W
4 ..	30·021	75·3	·628	·259	..	2·6 N	0·1 E	41 ..	·568	80·5	·930	·110	12·50	2·0 S	14·6 W
5 ..	·003	75·7	·651	·243	..	4·6 N	1·9 W	42 ..	·546	80·5	·903	·137	2·74	4·5 S	15·2 W
6 ..	29·983	78·5	·699	·283	..	0·9 N	0·4 E	43 ..	·688	81·4	·918	·154	2·26	3·2 S	9·7 W
7 ..	·978	74·2	·569	·280	..	3·0 N	1·9 W	44 ..	·667	80·3	·916	·118	2·52	2·8 S	9·1 W
8 ..	·954	75·5	·670	·215	..	0·0	0·1 W	45 ..	·723	80·4	·904	·133	1·26	3·9 S	6·6 W
9 ..	·913	76·3	·654	·257	..	0·2 S	0·8 W	46 ..	·710	80·6	·888	·156	0·73	3·5 S	9·1 W
10 ..	·916	76·5	·693	·223	..	3·6 N	2·9 W	47 ..	·734	80·9	·893	·162	0·87	0·7 N	8·2 W
11 ..	·895	78·5	·640	·341	..	4·4 N	1·8 W	48 ..	·682	80·1	·860	·169	1·39	0·5 S	4·9 W
12 ..	·863	76·5	·678	·284	..	3·9 N	4·4 W	49 ..	·688	79·6	·868	·146	2·49	3·5 S	7·4 W
13 ..	·929	76·2	·595	·310	..	0·9 N	2·4 W	50 ..	·713	79·8	·837	·181	0·76	1·9 S	3·1 W
14 ..	·927	77·4	·645	·299	..	5·0 N	3·3 W	51 ..	·853	80·1	·804	·225	..	1·5 S	1·1 W
15 ..	·831	79·2	·675	·327	..	6·0 N	4·3 W	52 ..	·861	80·9	·824	·232	..	2·9 N	2·3 W
16 ..	·877	79·4	·796	·211	..	0·2 N	2·3 W	53 ..	·775	81·5	·902	·177	0·94	2·1 N	2·9 W
17 ..	·862	80·2	·814	·220	..	1·0 N	3·1 W	54 ..	·784	82·5	·932	·183	..	0·3 N	1·0 W
18 ..	·835	80·9	·764	·295	..	2·0 N	3·5 W	55 ..	·811	83·1	·899	·235	..	0·6 N	2·1 W
19 ..	·849	81·4	·828	·248	..	3·3 N	4·1 W	56 ..	·837	81·7	·872	·213	..	3·9 N	3·6 W
20 ..	·876	82·9	·759	·370	..	5·1 N	4·7 W	57 ..	·885	80·7	·919	·129	0·50	1·9 N	1·2 W
21 ..	·882	84·0	·911	·258	..	0·7 S	3·5 W	58 ..	·852	82·2	·893	·213	..	1·1 N	0·7 E
22 ..	·803	83·5	·889	·263	..	2·6 N	3·9 W	59 ..	·856	83·5	·751	·403	..	3·5 N	1·9 E
23 ..	·763	85·5	·884	·343	..	5·8 N	5·5 W	60 ..	·832	81·2	·862	·208	0·15	0·3 N	0·3 E
24 ..	·822	83·3	·856	·287	..	2·0 N	4·6 W	61 ..	·861	80·1	·788	·245	..	2·0 N	0·1 W
25 ..	·799	84·4	·875	·312	..	3·9 N	4·9 W	62 ..	·917	79·9	·814	·209	..	2·8 N	0·6 W
26 ..	·798	84·2	·895	·281	..	0·5 N	4·9 W	63 ..	·910	79·6	·653	·364	..	2·9 N	1·1 E
27 ..	·747	85·6	·950	·280	..	0·9 S	4·3 W	64 ..	·881	80·5	·685	·364	..	3·4 N	1·3 E
28 ..	·741	86·3	·929	·330	..	1·7 S	4·6 W	65 ..	·842	82·5	·768	·346	1·00	3·7 N	1·7 E
29 ..	·786	86·1	·859	·391	..	2·4 S	4·5 W	66 ..	·867	75·5	·698	·189	2·62	1·5 N	0·7 E
30 ..	·790	85·8	·946	·294	0·43	0·5 N	3·7 W	67 ..	·927	75·8	·587	·310	..	3·8 N	4·3 E
31 ..	·767	86·0	·925	·323	..	0·3 S	3·7 W	68 ..	·959	77·0	·676	·258	..	2·4 N	1·3 E
32 ..	·722	87·5	·951	·354	..	0·9 S	5·9 W	69 ..	·983	77·1	·679	·256	..	2·7 N	1·3 E
33 ..	·609	86·4	·977	·287	0·69	0·0	2·7 W	70 ..	993	76·5	·593	·326	..	3·4 N	2·9 E
34 ..	·530	81·8	·936	·153	3·56	14·1 S	2·9 W	71 ..	·910	75·5	·645	·244	..	3·1 N	1·0 E
35 ..	·642	83·2	·965	·176	4·82	3·4 S	7·2 W	72 ..	·946	75·9	·663	·239	..	2·4 N	1·4 E
36 ..	·628	83·2	·951	·190	1·72	1·5 S	5·6 W	73 ..	·965	76·3	·659	·254	..	2·4 N	1·0 E
37 ..	·691	83·8	·948	·213	0·54	3·5 S	7·0 W								

* Five-day sums, *not means.*

Barometric Pressure, 1913.

TABLE I*a*.—*Daily and monthly means.*

Height of the Barometer above mean Sea-level=37 feet.

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	29·982	29·991	29·847	29·855	29·759	29·642	29·740	29·675	29·717	29·795	29·879	29·928
2	30·003	·982	·890	·842	·739	·592	·773	·664	·670	·828	·885	·917
3	29·960	·976	·873	·829	·783	·587	·786	·694	·696	·837	·902	·881
4	·942	·981	·885	·820	·785	·575	·755	·718	·781	·829	·919	·940
5	·959	·978	·912	·829	·785	·521	·714	·715	·816	·801	·911	·948
6	·947	·971	·892	·782	·782	·474	·725	·723	·799	·785	·942	·935
7	·916	·946	·868	·787	·797	·476	·687	·699	·785	·813	·943	·941
8	·941	·919	·856	·821	·789	·480	·623	·712	·823	·818	·941	·936
9	·963	·915	·869	811	·762	·492	·602	·750	·851	·786	·931	·904
10	·942	·896	·895	·793	·746	·498	·645	·759	·834	·787	·900	·929
11	·919	·922	·891	·799	·776	·461	·658	·758	·821	·748	·890	·930
12	·924	·933	·867	·811	·819	·497	·693	·741	·821	·721	·895	·908
13	·944	·882	·838	·796	·801	·632	·741	·715	·862	·703	·909	·892
14	·972	·890	·783	·790	·767	·699	·680	·711	·859	·714	·937	·891
15	·995	·895	·798	·790	·765	·695	·601	·749	·842	·779	·961	·875
16	30·014	·904	·868	·802	·810	·692	·542	·771	·803	·854	·960	·904
17	·010	·892	·881	·799	·828	·694	·524	·768	·783	·912	·949	·961
18	29·992	·850	·857	·799	·773	·731	·505	·765	·824	·930	·926	·948
19	·961	·843	·862	·788	·733	·789	·526	·730	·852	·916	·953	·937
20	·958	·839	·897	·764	·742	·822	·665	·700	·849	·940	·975	·961
21	·956	·842	·890	·782	·779	·773	·744	·725	·826	·966	·953	·993
22	·946	·865	·824	·778	·760	·733	·726	·766	·805	·962	·942	30·001
23	·953	·881	·802	·749	·757	·738	·655	·744	·828	·926	·935	·010
24	·970	·902	·875	·707	·737	·709	·610	·700	·849	·924	·938	·037
25	·982	·959	·890	·718	·735	·599	·632	·745	·840	·930	·941	·028
26	·999	·944	·867	·711	·735	·561	·637	·833	·829	·919	·927	·058
27	30·028	·869	·881	·726	·733	·616	·601	·802	·814	·902	·891	·065
28	29·999	·811	·900	·749	·725	·653	·598	·751	·784	·865	·869	·011
29	30·001		·896	·788	·684	·742	·658	·783	·763	·874	·893	·024
30	·002		·863	·756	·665	·767	·671	·824	·791	·885	·910	·124
31	29·994		·861		·640		·673	·787		·879		·156
Monthly Mean.	29·970	29·910	29·867	29·786	29·758	29·631	29·658	29·741	29·807	29·849	29·924	29·967
Annual Variation.	+ ·148	+ ·088	+ ·045	− ·036	− ·064	− ·191	− ·164	− ·081	− ·015	+ ·027	+ ·102	+ ·145

Annual Mean ..In. 29·822

TABLE I*b*.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0.001 inch.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 7	+ 3	+ 11	+ 9	+ 7	0	+ 5	+ 8	+ 3	+ 1	0	+ 1	+ 5	+ 4
1 7	− 7	− 2	− 9	− 6	− 14	− 11	− 9	− 12	− 12	− 17	− 11	− 6	− 10
2 7	− 19	− 17	− 23	− 20	− 22	− 23	− 23	− 26	− 25	− 29	− 23	− 17	− 22
3 7	− 26	− 26	− 31	− 27	− 24	− 28	− 28	− 33	− 30	− 30	− 29	− 24	− 28
4 7	− 24	− 29	− 32	− 24	− 18	− 26	− 28	− 30	− 29	− 25	− 26	− 23	− 26
5 7	− 14	− 22	− 20	− 10	− 8	− 21	− 23	− 23	− 16	− 8	− 13	− 13	− 16
6 7	+ 1	− 3	− 1	+ 5	+ 10	− 4	− 8	− 13	− 4	+ 10	+ 9	+ 2	0
7 7	+ 22	+ 21	+ 22	+ 28	+ 30	+ 13	+ 9	+ 7	+ 19	+ 31	+ 32	+ 22	+ 21
8 7	+ 48	+ 41	+ 45	+ 51	+ 44	+ 26	+ 24	+ 22	+ 41	+ 50	+ 52	+ 45	+ 41
9 7	+ 66	+ 59	+ 59	+ 62	+ 53	+ 37	+ 33	+ 34	+ 51	+ 62	+ 65	+ 60	+ 53
10 7	+ 65	+ 61	+ 61	+ 58	+ 50	+ 37	+ 33	+ 35	+ 51	+ 57	+ 58	+ 55	+ 52
11 7	+ 45	+ 45	+ 48	+ 50	+ 42	+ 34	+ 31	+ 32	+ 41	+ 39	+ 39	+ 37	+ 40
12 7	+ 15	+ 17	+ 23	+ 29	+ 26	+ 22	+ 22	+ 19	+ 18	+ 10	+ 9	+ 26	+ 20
13 7	− 17	− 10	− 4	− 1	+ 4	+ 5	+ 7	+ 4	− 6	− 18	− 20	− 22	− 6
14 7	− 41	− 35	− 31	− 30	− 18	− 12	− 10	− 13	− 28	− 43	− 42	− 46	− 29
15 7	− 50	− 48	− 47	− 48	− 38	− 25	− 23	− 23	− 39	− 55	− 51	− 55	− 42
16 7	− 50	− 49	− 51	− 57	− 50	− 39	− 34	− 31	− 43	− 53	− 50	− 52	− 47
17 7	− 40	− 40	− 44	− 52	− 48	− 36	− 30	− 24	− 33	− 42	− 39	− 40	− 39
18 7	− 28	− 30	− 31	− 38	− 37	− 29	− 20	− 15	− 19	− 24	− 24	− 24	− 27
19 7	− 9	− 11	− 14	− 22	− 20	− 11	− 5	− 2	− 4	− 2	− 1	− 3	− 9
20 7	+ 9	+ 08	+ 5	− 4	− 2	+ 7	+ 7	+ 10	+ 9	+ 18	+ 14	+ 15	+ 8
21 7	+ 20	+ 20	+ 20	+ 13	+ 11	+ 20	+ 18	+ 23	+ 24	+ 25	+ 24	+ 27	+ 20
22 7	+ 20	+ 22	+ 25	+ 21	+ 17	+ 25	+ 22	+ 26	+ 24	+ 21	+ 22	+ 27	+ 23
23 7	+ 12	+ 17	+ 21	+ 16	+ 12	+ 24	+ 18	+ 19	+ 15	+ 13	+ 14	+ 20	+ 17
Range.	116	110	112	119	103	76	67	68	94	117	116	115	100

Temperature of the Air, 1913.

TABLE IIa.—*Daily and monthly means.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	76·4	74·2	76·0	**77·8**	84·5	87·7	82·7	81·3	79·1	82·4	**81·0**	77·7
2 ..	**76·7**	75·2	75·9	77·9	84·0	87·6	82·6	80·7	**77·8**	81·5	80·8	76·9
3 ..	74·6	75·8	75·5	79·2	84·8	**88·0**	81·9	81·1	80·0	82·3	79·3	77·1
4 ..	74·1	75·9	75·5	79·8	84·2	86·7	81·3	81·3	80·3	82·9	79·0	76·6
5 ..	74·8	74·9	**74·2**	79·2	84·5	86·5	79·6	81·1	80·6	83·9	80·3	74·9
6 ..	75·7	75·5	74·5	81·1	**83·6**	86·2	**78·1**	80·6	80·0	**84·8**	80·7	74·2
7 ..	75·4	77·1	75·5	81·9	84·1	82·6	81·9	80·7	80·2	84·1	80·2	77·2
8 ..	75·6	77·2	75·5	80·1	84·3	81·0	80·0	79·9	80·0	84·7	79·6	**78·5**
9 ..	75·3	76·0	75·2	81·2	84·7	81·9	78·7	81·3	70·7	82·5	79·6	78·4
10 ..	74·4	75·8	75·5	81·4	84·4	81·3	81·9	81·4	79·1	**79·1**	79·2	78·1
11 ..	73·7	75·5	75·6	81·6	84·9	81·8	82·1	81·1	80·7	80·0	77·9	77·2
12 ..	72·3	75·2	76·5	82·3	85·1	83·6	82·1	81·6	80·6	80·4	78·0	75·9
13 ..	72·4	75·4	76·1	82·9	85·5	84·6	**82·9**	81·3	80·2	80·1	77·9	75·3
14 ..	72·6	75·0	76·8	83·1	85·7	84·9	81·5	81·6	80·8	81·7	77·4	74·9
15 ..	73·4	75·8	76·1	82·3	85·9	84·6	82·9	81·4	81·4	82·0	77·3	75·2
16 ..	73·6	76·5	74·7	82·0	85·8	84·6	81·1	81·4	79·0	80·5	77·7	77·4
17 ..	74·8	75·5	77·4	81·6	85·5	84·8	82·0	81·4	80·5	79·7	77·5	77·8
18 ..	74·5	75·5	77·3	81·7	85·1	85·0	78·9	80·8	81·4	79·1	77·3	76·3
19 ..	75·2	76·3	76·1	82·0	85·5	85·0	78·7	80·4	82·5	79·7	77·5	75·2
20 ..	75·5	77·5	75·2	81·8	85·8	85·1	81·1	**78·0**	80·1	80·9	78·2	75·8
21 ..	73·9	**77·7**	75·6	82·3	85·5	84·8	82·1	78·9	80·6	82·4	79·8	75·9
22 ..	73·4	76·2	78·2	82·2	85·3	78·7	81·5	80·5	81·3	82·6	77·8	74·8
23 ..	72·2	74·9	**80·0**	81·5	85·5	**76·5**	80·5	80·3	81·0	83·3	**75·6**	74·2
24 ..	**71·9**	75·4	79·1	81·2	85·5	78·0	80·8	80·9	80·8	83·0	76·5	72·8
25 ..	73·9	72·0	78·2	82·0	85·7	78·5	81·0	81·2	81·2	83·1	79·0	71·7
26 ..	75·5	**71·1**	77·5	82·0	86·6	81·5	81·1	81·1	81·3	81·5	79·8	**70·9**
27 ..	75·9	73·2	76·6	83·3	87·1	78·3	79·9	79·2	79·8	81·0	80·0	71·8
28 ..	75·1	75·9	77·6	84·9	87·6	81·4	80·0	80·9	81·6	80·4	78·9	71·7
29 ..	74·4		78·8	**85·0**	**87·7**	83·1	82·0	81·5	82·1	80·7	79·0	73·8
30 ..	73·7		78·6	83·9	87·5	83·0	81·8	**81·8**	**82·9**	81·3	78·4	75·1
31 ..	73·6	–	78·2		87·4		81·2	81·5		81·0		74·8
Monthly Mean.	**74·3**	75·4	76·6	81·7	**85·5**	83·2	81·1	80·8	80·6	81·7	78·7	75·4
Annual Variation.	– 5·3	– 4·2	– 3·0	+ 2·1	+ 5·9	+ 3·6	+ 1·5	+ 1·2	+ 1·0	+ 2·1	– 0·9	– 4·2

Annual Mean .. 79·6

TABLE IIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

1913. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
0 2	– 2·8	– 2·1	– 2·0	– 2·2	– 2·3	– 0·8	– 0·7	– 1·1	– 1·3	– 1·9	– 2·5	– 2·3	– 1·8
1 2	– 3·2	– 2·4	– 2·4	– 2·6	– 2·7	– 1·1	– 1·1	– 1·2	– 1·5	– 2·4	– 3·1	– 2·8	– 2·2
2 2	– 3·6	– 2·7	– 2·6	– 2·8	– 2·8	– 1·2	– 1·3	– 1·3	– 1·6	– 2·6	– 3·3	– 3·1	– 2·4
3 2	– 4·0	– 3·3	– 3·1	– 3·3	– 3·1	– 1·3	– 1·3	– 1·5	– 1·7	– 2·8	– 3·8	– 3·6	– 2·7
4 2	– 4·2	– 3·7	– 3·6	– 3·6	– 3·1	– 1·4	– 1·4	– 1·4	– 1·8	– 3·2	– 4·1	– 3·9	– 2·9
5 2	– 4·6	– 4·0	– 4·1	– **3·8**	– **3·3**	– 1·5	– **1·5**	– **1·6**	– 1·9	– 3·3	– 4·5	– 4·1	– 3·2
6 2	– 4·8	– 4·3	– **4·5**	– 3·8	– 3·1	– **1·6**	– 1·3	– 1·5	– **2·2**	– **3·4**	– **4·9**	– 4·4	– **3·3**
7 2	– **5·0**	– **4·6**	– 4·1	– 2·6	– 2·1	– 1·3	– 1·1	– 1·3	– 1·9	– 3·0	– 4·7	– **4·6**	– 3·0
8 2	– 3·8	– 2·9	– 1·9	– 1·0	– 0·6	– 0·5	– 0·5	– 0·5	– 1·2	– 1·8	– 3·2	– 3·2	– 1·8
9 2	– 2·2	– 0·7	0 0	+ 0·4	+ 0·8	+ 0·4	0 0	+ 0·2	– 0·5	– 0·3	– 1·3	– 1·4	– 0·4
10 2	+ 0·5	+ 1·4	+ 1·7	+ 1·8	+ 2·1	+ 1·3	+ 0·8	+ 1·3	+ 0·7	+ 1·4	+ 1·2	+ 0·9	+ 1·3
11 2	+ 2·8	+ 2·9	+ 2·8	+ 2·9	+ 3·1	+ 1·8	+ 0·9	+ 2·0	+ 1·5	+ 2·8	+ 3·4	+ 2·9	+ 2·5
12 2	+ 4·9	+ 4·1	+ 3·8	+ 3·9	+ 4·1	+ 2·2	+ 1·5	+ 2·5	+ 2·5	+ 3·7	+ 5·3	+ 4·6	+ 3·6
13 2	+ 6·1	+ 4·8	+ 4·4	+ 4·2	+ 4·3	+ 2·2	+ 1·7	+ 2·3	+ 2·9	+ 4·4	+ 6·1	+ 5·7	+ 4·1
14 2	+ **6·7**	+ **5·2**	+ **4·9**	+ **4·6**	+ **4·5**	+ **2·3**	+ **2·0**	+ **2·5**	+ **3·3**	+ **4·7**	+ **6·5**	+ **6·1**	+ **4·4**
15 2	+ 6·4	+ 5·0	+ 4·7	+ 4·4	+ 4·2	+ 2·0	+ 1·8	+ 2·1	+ 3·2	+ 4·6	+ 5·9	+ 5·5	+ 4·1
16 2	+ 5·8	+ 4·5	+ 4·3	+ 3·8	+ 3·6	+ 1·5	+ 1·1	+ 1·8	+ 2·3	+ 4·1	+ 5·0	+ 4·6	+ 3·5
17 2	+ 4·1	+ 3·1	+ 3·1	+ 2·7	+ 2·3	+ 0·8	+ 0·9	+ 1·2	+ 1·4	+ 2·4	+ 3·1	+ 2·9	+ 2·3
18 2	+ 2·4	+ 1·6	+ 1·3	+ 0·9	+ 0·4	+ 0·3	+ 0·4	+ 0·2	+ 0·6	+ 1·2	+ 1·9	+ 1·8	+ 1·1
19 2	+ 1·6	+ 0·9	+ 0·3	– 0·2	– 0·7	– 0·2	+ 0·1	– 0·3	– 0·1	+ 0·1	+ 1·2	+ 1·2	+ 0·3
20 2	+ 1·0	+ 0·4	– 0·2	– 0·8	– 1·1	– 0·6	0·0	– 0·5	– 0·4	– 0·4	+ 0·7	+ 0·7	– 0·1
21 2	+ 0·2	– 0·1	– 0·8	– 1·2	– 1·4	– 0·8	– 0·3	– 0·8	– 0·8	– 1·1	– 0·6	– 0·1	– 0·6
22 2	– 1·0	– 0·8	– 1·1	– 1·3	– 1·7	– 0·6	– 0·3	– 1·0	– 0·9	– 1·4	– 1·6	– 1·0	– 1·1
23 2	– 2·2	– 1·5	– 1·6	– 1·7	– 2·0	– 0·8	– 0·6	– 1·0	– 1·1	– 1·8	– 2·3	– 1·9	– 1·5
Range.	11·7	9·8	9·4	8·4	7·8	3·9	3·5	4·1	5·5	8·1	11·4	9·3	7·7

Temperature of the Air, 1913.

TABLE IIc.—*Showing the maximum Temperature of the Air on each day during the year* 1913.

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	**86·5**	82·3	84·5	86·6	91·4	94·4	86·9	84·9	82·6	87·9	**90·2**	85·1
2 ..	85·9	83·4	85·1	84·1	91·0	94·4	**87·4**	82·0	79·2	88·2	88·2	85·0
3 ..	84·1	84·0	83·9	85·3	91·5	94·4	87·3	85·4	84·5	88·1	87·2	85·6
4 ..	83·9	83·8	83·9	86·4	91·0	**95·0**	84·5	84·9	84·9	88·6	86·9	82·9
5 ..	85·0	83·4	82·3	87·1	90·9	93·0	85·1	84·1	84·7	90·4	88·1	81·6
6 ..	85·1	84·1	83·9	90·2	90·8	93·0	82·4	84·3	84·9	90·6	88·9	82·1
7 ..	85·9	85·0	84·6	90·2	90·6	85·3	86·5	83·3	84·3	88·9	87·9	85·2
8 ..	84·6	85·1	83·3	88·3	91·2	84·4	85·6	82·5	84·9	90·2	88·0	85·8
9 ..	84·1	83·3	83·3	90·6	91·1	84·7	82·1	84·5	85·1	88·9	88·6	85·0
10 ..	83·1	83·9	83·7	89·3	91·2	83·9	85·7	85·9	83·1	85·1	89·2	84·9
11 ..	82·1	84·9	85·0	88·3	91·3	85·2	85·6	85·9	86·1	86·1	86·3	84·3
12 ..	81·4	84·3	85·4	89·1	91·4	86·1	85·8	85·4	85·9	87·0	87·3	82·7
13 ..	80·8	85·1	84·7	90·8	91·3	88·8	87·1	86·0	85·5	87·1	86·4	82·3
14 ..	81·6	83·9	84·3	90·4	91·3	89·3	85·9	86·1	86·0	87·8	85·9	82·0
15 ..	82·5	83·1	84·5	90·2	91·5	89·3	86·9	85·1	86·9	88·0	84·9	83·6
16 ..	83·3	83·1	83·9	88·9	92·1	89·4	84·9	85·6	81·1	86·6	87·1	**87·7**
17 ..	84·9	84·9	85·0	89·1	91·6	89·2	83·9	85·8	86·2	85·1	87·3	86·6
18 ..	84·1	85·1	85·5	89·1	91·5	89·9	81·1	85·1	84·9	84·6	86·7	85·1
19 ..	85·1	86·0	84·1	89·3	90·7	89·8	79·2	85·0	87·9	86·3	86·4	85·9
20 ..	85·9	86·3	83·7	89·1	91·7	89·8	84·1	82·5	85·1	88·0	86·3	86·5
21 ..	83·1	85·1	85·3	89·3	92·5	91·0	85·9	84·2	84·9	89·1	90·2	85·4
22 ..	82·7	84·1	88·3	90·0	92·3	79·5	85·4	83·6	86·3	90·2	84·6	82·9
23 ..	81·5	83·1	**89·1**	89·2	93·3	78·2	82·6	84·5	85·8	**91·0**	83·5	81·6
24 ..	82·1	83·4	86·3	89·1	93·4	81·3	83·9	84·1	86·1	90·9	84·1	81·1
25 ..	84·9	79·5	86·5	88·9	93·4	81·7	83·1	84·3	86·3	90·6	86·8	80·3
26 ..	84·9	83·1	85·3	89·1	93·4	85·1	83·6	86·3	88·1	89·1	86·9	80·1
27 ..	84·5	84·6	85·3	90·5	94·0	81·9	83·3	83·9	87·3	88·9	87·2	80·2
28 ..	82·6	**87·4**	86·3	90·8	93·4	85·3	81·6	85·3	88·4	88·3	85·5	79·2
29 ..	83·0		87·1	**91·0**	93·3	87·3	85·4	86·5	87·6	88·9	85·0	82·3
30 ..	82·5		86·1	87·8	93·8	86·9	85·2	**87·1**	**88·6**	89·4	84·4	82·1
31 ..	82·9		86·9		**94·5**		83·8	86·4		89·5		82·7
Monthly Mean.	83·7	84·1	85·0	88·9	**92·0**	87·6	84·6	84·9	85·4	88·4	86·9	**83·5**

Annual Mean .. 86·2°
The greatest maximum temperature recorded during the year (that of 4th June) was .. 95·0

TABLE IId.—*Showing the minimum Temperature of the Air on each day during the year* 1913.

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	70·8	69·5	68·3	**71·3**	80·4	85·2	79·4	79·4	77·6	79·9	75·2	73·3
2 ..	70·6	69·3	**67·3**	72·3	79·3	84·2	80·2	79·4	76·1	78·2	75·2	71·3
3 ..	68·5	71·3	70·5	74·4	81·0	84·5	78·2	77·2	76·0	79·4	74·4	70·3
4 ..	65·8	70·8	75·2	75·4	79·9	82·2	78·7	78·8	76·4	79·8	73·8	72·3
5 ..	67·7	68·3	70·3	74·4	80·2	80·4	76·5	77·9	78·2	79·9	74·1	69·3
6 ..	69·3	69·3	69·3	74·4	**78·8**	83·4	**73·9**	76·6	78·8	80·4	75·6	68·4
7 ..	68·8	72·0	70·5	75·4	79·8	79·9	77·8	78·4	77·6	80·2	74·9	72·1
8 ..	69·8	72·3	70·8	75·4	79·5	79·2	76·6	78·4	76·2	81·4	75·2	73·3
9 ..	70·3	71·5	71·5	75·1	80·4	78·8	75·7	77·9	76·4	82·4	73·7	73·5
10 ..	68·3	70·8	72·1	76·1	79·4	78·8	77·2	79·2	76·3	75·8	74·1	72·3
11 ..	68·3	69·3	70·3	77·1	80·2	79·4	78·4	78·6	76·6	76·0	73·3	72·5
12 ..	66·8	68·5	71·3	77·8	80·8	78·5	78·4	78·9	76·6	76·8	72·3	71·3
13 ..	66·1	67·5	69·4	77·3	81·6	81·6	78·4	77·4	**75·4**	75·9	70·3	71·3
14 ..	66·3	69·1	71·9	78·6	81·9	81·9	78·4	78·2	76·5	76·7	**70·1**	70·8
15 ..	66·3	70·8	70·3	77·2	82·2	81·6	77·8	78·4	77·4	76·4	72·1	68·6
16 ..	65·7	71·3	68·5	77·1	82·1	80·9	77·9	77·8	75·9	76·4	71·3	70·1
17 ..	69·0	68·3	72·7	76·4	81·4	80·6	78·4	78·9	76·3	76·4	71·3	73·1
18 ..	68·1	67·3	72·6	76·4	81·2	81·2	76·2	78·0	78·6	74·4	71·7	70·5
19 ..	69·1	69·6	73·3	77·2	81·4	81·7	76·0	77·2	79·4	75·2	70·1	68·3
20 ..	69·3	71·1	70·3	78·4	82·1	81·6	76·4	75·4	76·8	76·2	71·3	68·7
21 ..	66·8	72·3	68·3	78·2	81·4	81·9	77·4	**74·9**	77·4	77·2	72·1	70·6
22 ..	67·8	72·3	70·9	77·2	80·6	75·6	78·4	77·8	76·7	75·8	72·7	67·3
23 ..	64·3	71·5	72·8	77·4	81·6	**74·4**	77·2	76·8	76·4	76·4	70·3	69·2
24 ..	**63·8**	72·1	74·4	77·4	81·9	74·4	76·4	78·2	76·6	76·4	70·1	66·9
25 ..	68·3	68·3	73·0	77·6	82·8	75·7	79·1	78·7	76·4	75·8	73·5	64·1
26 ..	68·8	**63·3**	73·3	77·4	83·1	77·4	78·4	77·4	79·0	76·2	75·4	**63·7**
27 ..	71·3	65·3	72·0	78·6	83·2	74·4	77·2	77·5	75·4	74·1	75·8	65·7
28 ..	69·8	68·3	72·3	81·6	83·4	74·6	77·2	75·7	77·4	**73·3**	73·8	64·5
29 ..	68·3		72·0	81·4	84·2	79·6	77·9	77·8	77·4	74·6	73·3	68·1
30 ..	67·3		71·1	80·4	84·1	79·6	78·8	78·2	79·4	76·3	74·6	70·5
31 ..	67·3		72·7		82·9		79·8	78·0		76·4		70·6
Monthly Mean.	**68·0**	69·7	71·3	76·8	**81·4**	79·8	74·5	77·8	77·0	77·1	73·1	69·8

Annual Mean .. 74·7°
The least minimum temperature recorded during the year (that of 26th February) was .. 63·3

Pressure of Vapour, 1913.

TABLE IIIa.—*Daily and Monthly Means.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	0·607	0·618	0·611	**0·761**	0·919	**1·007**	0·935	0·891	0·844	0·925	0·720	0·723
2 ..	·578	·668	·635	·766	·946	0·975	·928	·904	·863	·954	·756	·650
3 ..	·592	·707	·676	·764	·929	·973	·933	**·912**	·908	·965	·734	·639
4 ..	·603	·732	·653	·772	·910	·930	·910	·904	·898	·998	**·799**	·668
5 ..	·623	·662	·533	·781	·897	·972	·889	·895	·889	1·014	·790	·571
6 ..	·612	·661	·567	·820	·876	·987	**·857**	·891	·864	**·050**	·679	·621
7 ..	·600	·718	·652	·765	·886	·957	·918	·893	·848	·005	·717	·757
8 ..	·596	·682	·678	·829	·869	·942	·927	·868	·859	·003	·722	·792
9 ..	·550	·682	·681	·787	·880	·971	·903	·901	·840	0·969	·689	**·803**
10 ..	·566	·649	·665	·810	·869	·948	·938	·890	·820	·883	·669	·751
11 ..	·561	·571	·697	·871	·848	·947	·933	·894	·819	·889	·686	·725
12 ..	·583	·582	·645	·853	**·829**	·987	·929	·886	**·802**	·880	·709	·711
13 ..	·574	·545	·635	·829	·866	·998	·938	·848	·819	·872	·676	·677
14 ..	·603	·611	·723	·840	·878	·976	·946	·832	·832	·908	·722	·672
15 ..	·574	·669	·663	·844	·892	·945	·945	**·822**	·823	·851	·714	·609
16 ..	·522	·662	·645	·858	·896	·946	·929	·838	·836	·837	·684	·636
17 ..	·584	·502	·747	·815	·888	·942	**·948**	·847	·885	·823	·640	·575
18 ..	·575	·553	·727	·820	·860	·915	·912	·827	·921	·781	·658	·525
19 ..	·603	·609	·558	·865	·857	·931	·903	·827	·968	·823	·655	·563
20 ..	·622	·709	·536	·866	·905	·906	·924	·843	·935	·893	·689	·576
21 ..	·625	**·793**	**·527**	·839	·913	·902	·933	·855	·909	·863	·691	·583
22 ..	·628	·694	·619	·868	·898	·856	·908	·850	·861	·801	·702	·627
23 ..	**·499**	·614	·733	·876	·902	**·829**	·898	·839	·851	·750	**·618**	·608
24 ..	·514	·588	**·826**	·877	·907	·865	·913	·862	·831	·764	·661	·550
25 ..	·607	·444	·728	·852	·936	·900	·914	·870	·832	·768	·741	**·475**
26 ..	·613	**·406**	·696	·860	·955	·964	·901	·876	·864	·771	·749	·495
27 ..	**·655**	·521	·724	·937	·971	·902	·906	·851	·885	**·749**	·699	·534
28 ..	·652	·543	·715	**1·010**	·967	·964	·912	·846	·907	·786	·731	·537
29 ..	·591		·728	0·995	·975	·982	·940	·852	·928	·755	·766	·642
30 ..	·541		·734	·939	**·987**	·966	·930	·879	**·994**	·762	·782	·733
31 ..	·565		·779		·972		·920	·858		·757		·718
Monthly Mean.	**0·588**	0·621	0·669	0·846	0·906	**0·943**	0·920	0·866	0·871	0·866	0·708	0·637
Annual Variation.	−·199	−·166	−·118	+·059	+·119	+·156	+·133	+·079	+·084	+·079	−·079	−·150

Annual Mean .. .. In 0·787

TABLE IIIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0·001 inch.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. M.													
0 2	+ 7	− 5	+ 9	− 4	− 9	− 6	− 14	− 8	− 18	− 3	− 5	− 9	− 5
1 2	+ 7	0	+ 7	− 10	− 16	− 11	− 12	− 15	− **22**	− 18	− 16	− 12	− 10
2 2	+ 6	− 4	+ 4	− 10	− 10	− 10	− 20	− 14	− 20	− 31	− 14	− 19	− 12
3 2	− 13	− 17	− 2	− 20	− **20**	− 14	− 16	− **17**	− 22	− 33	− 25	− 19	− 18
4 2	− 17	− 18	− 4	− **28**	− 20	− **18**	− 20	− 16	− 19	− 33	− 39	− 24	− 21
5 2	− 32	− 32	− 17	− 26	− 19	− 18	− **24**	− 17	− 11	− **35**	− 36	− **36**	− **25**
6 2	− 43	− 35	− **26**	− 20	− 11	− 17	− 18	− 14	− 9	− 32	− 45	− 29	− 25
7 2	− 46	− **44**	− 25	− 9	− 14	− 12	− 15	− 11	− 1	− 18	− 35	− 33	− 22
8 2	− 37	− 43	− 11	+ 6	− 4	0	+ 1	+ 3	+ 16	− 13	− 35	− 22	− 12
9 2	− 30	− 28	− 24	+ 2	− 1	+ 9	+ 9	+ 7	+ 22	− 13	− 29	− 16	− 8
10 2	− 30	− 14	− 11	+ 8	+ 9	+ 20	+ 23	+ 27	+ 28	+ 9	− 16	− 5	+ 4
11 2	− 34	− 19	− 2	+ 13	+ 6	+ 24	+ 23	+ 24	+ 24	+ 6	− 23	− 12	+ 2
12 2	− **62**	− 12	+ 13	+ 14	+ 12	+ **25**	+ 24	+ **31**	+ **33**	+ 6	− **47**	− 22	+ 1
13 2	− 46	+ 13	+ 10	+ **19**	+ 14	+ 20	+ 23	+ 23	+ 28	+ 11	− 38	− 16	+ 5
14 2	+ 5	+ 25	+ 15	+ 14	+ 16	+ 19	+ **30**	+ 21	+ 22	+ 34	+ 9	+ 15	+ 19
15 2	+ 27	+ 27	+ 12	+ 8	+ 14	+ 12	+ 20	+ 14	+ 15	+ **45**	+ 35	+ 38	+ 22
16 2	+ 41	+ **38**	+ 5	+ 8	+ **18**	+ 5	+ 12	+ 13	+ 10	+ 43	+ 49	+ 42	+ **24**
17 2	+ 52	+ 28	− 3	+ 5	+ 16	− 2	+ 5	− 2	0	+ 29	+ 60	+ 41	+ 19
18 2	+ 59	+ 32	− 1	− 2	+ 9	− 1	− 3	− 5	− 10	+ 19	+ 60	+ **46**	+ **17**
19 2	+ 54	+ 28	− 1	+ 3	+ 4	− 4	− 7	− 7	− 20	+ 18	+ 70	+ 45	+ 15
20 2	+ **66**	+ 38	+ 8	+ 6	+ 4	− 4	− 6	− 7	− 12	+ 20	+ **79**	+ 36	+ 19
21 2	+ 47	+ 28	+ 11	+ 6	+ 1	− 12	− 5	− 11	− 11	+ 8	+ 48	+ 27	+ 11
22 2	+ 16	+ 24	+ 16	+ 7	+ 4	− 5	− 1	− 8	− 9	− 7	− 5	+ 3	+ 3
23 2	− 5	0	+ **18**	+ 2	− 5	− 6	− 10	− 8	− 15	− 9	+ 6	− 18	− 4
Range.	128	82	44	47	38	43	54	48	55	80	126	82	49

Additional Capacity of the Air, 1913.

TABLE IV*a*.—*Daily and Monthly Means.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	0·312	0·231	0·291	0·197	0·268	0·309	0·184	0·176	0·150	0·183	0·343	0·231
2 ..	**·350**	·211	·265	·193	**·224**	·336	**·188**	·143	**·090**	·124	·298	·280
3 ..	·271	·187	·210	·237	·271	**·355**	·159	·149	·116	·139	·273	·302
4 ..	·247	·166	·232	·248	·268	·349	·158	·164	·137	·130	·199	·249
5 ..	·249	·205	·314	·220	·291	·295	·125	·166	·156	·150	·251	·296
6 ..	·285	·225	·296	·249	·281	·265	·107	·154	·163	·148	**·373**	·231
7 ..	·288	·217	·236	**·331**	·285	·157	·174	·153	·183	·167	·319	·183
8 ..	·297	·253	·207	·203	·313	·116	·099	·154	·166	·188	·293	·186
9 ..	·335	·219	·195	·285	·317	·118	·080	·167	·211	·149	·331	·172
10 ..	·293	·245	·219	·263	·315	·121	·153	·181	·175	**·114**	·338	·214
11 ..	·277	·315	·199	·213	·355	·139	·163	·170	·228	·140	·275	·211
12 ..	·213	·297	·271	·251	**·388**	·164	·170	·196	·243	·162	·258	·185
13 ..	·225	·340	·269	·302	·362	·193	·186	·222	·213	·161	·288	·203
14 ..	·203	·261	·202	·296	·358	·226	·130	·247	·222	·178	·225	·197
15 ..	·254	·227	·241	·264	·350	·246	·182	**·251**	**·250**	·246	·229	·271
16 ..	·314	·253	·223	·239	·343	·242	·132	·235	·154	·208	·276	·315
17 ..	·289	**·387**	195	·267	·338	·254	·144	·226	·159	·194	·312	·384
18 ..	·286	·337	·212	·265	·352	·292	**·075**	·222	·152	·214	·287	**·387**
19 ..	·277	·305	·343	·232	·368	·275	·079	·211	·143	·195	·296	·322
20 ..	·270	·243	·341	·224	·333	·303	·139	**·114**	·094	·166	·283	·325
21 ..	·217	**·162**	**·364**	·270	·314	·294	·164	·135	·136	·247	·340	·320
22 ..	**·199**	·209	·354	·237	·323	·131	·168	·190	·210	·319	·255	·244
23 ..	·294	·251	·295	·203	·326	·084	·144	·194	·210	**·399**	·274	·241
24 ..	·274	·295	**·172**	**·191**	·319	·096	·139	·194	·227	·372	·256	·261
25 ..	·239	·342	·241	·245	·298	·077	·142	·193	·235	·371	·257	·307
26 ..	·277	·364	·249	·236	·315	·108	·159	·188	·209	·309	·273	·270
27 ..	·244	·306	·196	·208	·318	**·070**	·115	·147	·135	·314	·328	·250
28 ..	·222	·359	·236	·192	·343	·111	·113	·210	·173	·259	·260	·246
29 ..	·264		·261	·213	·340	·152	·153	·224	·172	·297	·229	·201
30 ..	·294		·248	·223	·320	·165	·156	·207	·135	·311	**·193**	**·141**
31 ..	·268		·192		·332		·146	·221		·308		·149
Monthly Mean.	0·269	0·265	0·251	0·240	**0·320**	0·201	**0·143**	0·187	0·175	0·221	0·280	0·251
Annual Variation.	+ ·035	+ ·031	+ ·017	+ ·006	+ ·086	− ·033	− ·091	− ·047	− ·059	− ·013	+ ·046	+ ·017

Annual Mean .. Inch. 0·234

TABLE IV*b*.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0·001 inch.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 2	− 91	− 61	− 72	− 74	− 82	− 27	− 13	− 30	− 27	− 66	− 78	− 63	− 57
1 2	−102	− 73	− 81	− 80	− 87	− 34	− 25	− 28	− 28	− 66	− 84	− 73	− 63
2 2	**−111**	− 78	− 82	− 88	− 98	− 40	− 24	− 33	− 36	− 60	− 95	− 74	− 68
3 2	−103	− 79	− 93	− 92	− 98	− 39	**− 31**	− 35	− 38	− 66	− 97	− 87	− 71
4 2	−105	**− 90**	−103	− 94	−101	− 39	− 30	− 34	− 41	− 76	− 91	− 89	− 74
5 2	− 99	− 83	−104	−102	− 104	− 42	− 29	**− 39**	− 55	− 80	−106	− 83	− 77
6 2	− 92	− 88	**−109**	**−109**	**− 109**	**− 50**	− 28	− 38	− 64	− 83	−108	− 97	**− 81**
7 2	− 95	− 87	− 93	− 83	− 68	− 40	− 25	− 35	**− 66**	**− 84**	**−112**	**− 99**	− 74
8 2	− 73	− 43	− 49	− 42	− 23	− 21	− 17	− 24	**− 57**	− 53	− 70	− 73	− 45
9 2	− 39	+ 3	+ 22	+ 10	+ 30	+ 4	− 8	0	− 39	− 3	− 18	− 31	− 6
10 2	+ 36	+ 50	+ 64	+ 54	+ 72	+ 27	+ 4	+ 16	− 6	+ 38	+ 48	+ 25	+ 36
11 2	+107	+102	+ 87	+ 90	+119	+ 46	+ 10	+ 44	+ 29	+ 93	+131	+ 96	+ 79
12 2	+204	**+135**	+107	+127	+154	+ 60	+ 29	+ 55	+ 53	+126	+225	+164	+120
13 2	**+228**	+132	+129	+136	+162	+ 69	+ 38	+ 56	+ 77	**+151**	**+247**	**+193**	**+135**
14 2	+196	+134	**+141**	**+158**	**+167**	**+ 77**	+ 39	**+ 65**	+ 95	+140	+214	+176	+133
15 2	+164	+126	+135	+152	+156	+ 67	**+ 45**	+ 58	**+ 98**	+121	+165	+131	+118
16 2	+129	+ 99	+129	+130	+125	+ 52	+ 29	+ 47	+ 72	+105	+116	+ 97	+ 94
17 2	+ 63	+ 63	+ 98	+ 89	+ 72	+ 31	+ 26	+ 40	+ 48	+ 55	+ 38	+ 39	+ 55
18 2	+ 3	+ 9	+ 37	+ 30	+ 3	+ 10	+ 16	+ 9	+ 28	+ 19	− 3	+ 1	+ 13
19 2	− 16	− 7	+ 5	− 12	− 33	− 7	+ 10	− 5	+ 17	− 17	− 37	− 17	− 10
20 2	− 45	− 31	− 19	− 36	− 51	− 22	+ 3	− 11	− 3	− 36	− 65	− 22	− 28
21 2	− 51	− 38	− 38	− 48	− 57	− 21	− 5	− 19	− 15	− 49	− 75	− 37	− 38
22 2	− 53	− 54	− 54	− 55	− 71	− 21	− 11	− 28	− 22	− 45	− 52	− 38	− 42
23 2	− 65	− 48	− 69	− 63	− 73	− 30	− 10	− 29	− 23	− 57	− 83	− 43	− 49
Range.	339	225	250	267	276	127	76	104	164	235	359	292	216

Rainfall, 1913.

TABLE Va.—*Total fall of rain (in inches) as measured by F. Chambers's self-registering gauge, the funnel of which is 28 feet above the ground.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.							
1	..	..	..	..	..	..	0·04	0·09	0·19	..	..	..
2	..	..	..	..	..	..	0·06	0·08	1·28	..	..	..
3	..	..	..	..	..	..	0·89	0·10	0·32	..	..	..
4	..	..	..	..	..	0·01	0·62	0·09	0·35	..	..	..
5	..	..	..	..	..	..	3·73	0·11	0·03	..	..	..
6	..	..	..	..	..	0·01	1·20	0·26	..	..	..	..
7	..	..	..	..	..	0·38	..	0·13	0·01	..	..	..
8	..	..	..	..	..	2·62	4·73	0·09	0·12	..	..	..
9	..	..	..	..	..	0·73	**5·52**	0·03	..	**1·39**	..	..
10	..	..	..	..	..	1·45	0·01	..	0·14	0·40	..	..
11	..	..	..	..	..	0·82	0·36	0·12	..	0·01	..	..
12	..	..	..	..	..	0·27	0·31	..	..	0·22	..	..
13	..	..	..	..	..	0·02	0·27	..	0·01	0·14	..	..
14	..	..	..	..	..	..	0·88	..	..	..	..	..
15	..	..	..	..	..	0·03	0·08	..	0·01	..	..	..
16	..	..	..	..	..	0·03	1·23	0·04	0·24	..	..	..
17	..	..	..	..	..	0·01	0·10	0·03	..	..	..	..
18	..	..	..	..	..	..	4·28	0·09	..	..	..	..
19	..	..	..	..	..	..	3·74	0·01	..	..	..	..
20	..	..	..	..	..	..	0·41	**0·72**	**1·93**	..	..	..
21	..	..	..	..	..	..	0·12	0·57	0·62	..	..	..
22	..	..	..	..	..	2·53	0·31	0·08	..	..	..	..
23	..	..	..	..	..	1·24	1·11	0·17	..	..	..	..
24	..	..	..	..	..	2·04	0·76	..	..	..	..	..
25	..	..	..	..	..	**5·08**	0·57	0·05	..	..	..	..
26	..	..	..	..	..	3·43	0·01	0·07	0·11	..	..	..
27	..	..	..	..	..	3·37	0·67	0·34	0·11	..	..	..
28	..	..	..	..	..	0·46	0·59	0·01	0·01	..	..	..
29	..	..	..	..	..	0·15	0·04	..	..	..	..	..
30	..	..	..	..	..	0·04	0·06	..	..	..	..	..
31	..		..		..		0·25	..		..		..
Monthly Total.	..	..	..	..	..	24·72	**32·95**	3·28	5·48	2·16	..	..
Number of rainy days.	..	..	..	..	..	21	**30**	22	16	5	..	..

Total fall of rain in the year .. 68·59 In.
Total number of rainy days in the year .. 94
The greatest daily fall of rain in the year (that of 9th July) was .. 5·52 In.

No rain fell in the months of January, February, March, April, May, November and December, nor on any of the days left blank in the above table.

TABLE Vb.—*Total fall of rain (in inches) as measured by Newman's gauge, placed 4½ feet above the ground.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.							
1	..	..	..	..	..	..	0·04	0·09	0·20	..	..	..
2	..	..	..	..	..	..	0·08	0·09	1·38	..	..	..
3	..	..	..	..	..	..	0·90	0·11	0·30	..	..	..
4	..	..	..	..	..	0·01	0·63	0·11	0·37	..	..	..
5	..	..	..	..	..	..	3·91	0·12	0·03	..	..	..
6	..	..	..	..	..	0·01	1·23	0·26	..	..	..	..
7	..	..	..	..	..	0·41	..	0·13	0·02	..	..	..
8	..	..	..	..	..	2·97	4·70	0·10	0·12	..	..	..
9	..	..	..	..	..	0·80	**5·50**	0·03	..	**1·50**	..	..
10	..	..	..	..	..	1·48	0·01	..	0·16	0·45	..	..
11	..	..	..	..	..	0·82	0·37	0·13	..	0·01	..	..
12	..	..	..	..	..	0·27	0·28	..	..	0·24	..	..
13	..	..	..	..	..	0·02	0·30	..	0·01	0·15	..	..
14	..	..	..	..	..	..	0·88	..	..	..	..	..
15	..	..	..	..	..	0·06	0·08	..	0·01	..	..	..
16	..	..	..	..	..	0·03	1·31	0·05	0·27	..	..	..
17	..	..	..	..	..	0·01	0·11	0·03	..	..	..	..
18	..	..	..	..	..	..	4·28	0·10	..	..	..	..
19	..	..	..	..	..	..	3·84	0·01	..	..	..	..
20	..	..	..	..	..	..	0·42	**0·75**	**2·01**	..	..	..
21	..	..	..	..	..	..	0·14	0·59	0·62	..	..	..
22	..	..	..	..	..	2·60	0·32	0·08	..	..	..	..
23	..	..	..	..	..	1·28	1·13	0·19	..	..	..	..
24	..	..	..	..	..	2·11	0·78	..	..	..	..	..
25	..	..	..	..	..	**5·15**	0·60	0·06	..	..	..	..
26	..	..	..	..	..	3·59	0·01	0·09	0·11	..	..	..
27	..	..	..	..	..	3·51	0·71	0·34	0·12	..	..	..
28	..	..	..	..	..	0·48	0·64	0·01	0·02	..	..	..
29	..		..	..	..	0·15	0·05	..	..	..	..	..
30	..		..	..	..	0·05	0·07	..	..	..	..	..
31	..		..		..		0·26	..		..		..
Monthly Total.	..	..	..	..	..	25·81	**33·58**	3·47	5·75	2·35	..	..
Number of rainy days.	..	..	..	..	..	21	**30**	22	16	5	..	..

Total fall of rain in the year .. 70·96 In.
Total number of rainy days in the year .. 94
The greatest daily fall of rain in the year (that of 9th July) was .. 5·50 In.

No rain fell in the months of January, February, March, April, May, November and December, nor on any of the days left blank in the above table.

Velocity of Wind, 1913.

Robinson Beckley's Anemograph.

Table VIa.—*Mean Velocity of the Wind in miles per hour, without regard to the Direction from which it blew for each day of Bombay Civil Time; also the Mean Monthly Velocity and its variation from the Mean of the year.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	4·5	4·2	5·6	6·7	5·9	7·5	5·3	12·9	8·9	5·7	5·7	6·4
2 ..	7·0	3·9	7·4	4·1	6·0	7·1	4·3	13·9	9·6	5·5	5·1	5·6
3 ..	5·8	5·7	7·1	5·0	7·0	6·9	6·2	11·7	12·4	6·1	4·9	4·5
4 ..	5·0	5·6	5·5	5·4	4·5	7·1	8·9	11·5	7·5	4·8	5·6	6·4
5 ..	4·9	7·5	7·4	5·4	6·2	6·7	12·2	10·6	10·1	4·3	5·4	8·0
6 ..	4·9	5·7	3·3	6·6	5·2	4·6	3·9	11·1	9·9	3·2	5·6	3·6
7 ..	5·7	5·4	5·1	6·1	5·9	8·4	6·2	9·9	8·1	3·5	6·5	5·2
8 ..	6·2	7·5	5·9	5·3	5·8	13·2	6·8	8·4	5·6	6·4	5·4	5·1
9 ..	5·6	5·2	5·6	6·6	4·9	11·1	6·5	6·5	4·8	4·4	7·1	6·2
10 ..	5·4	6·2	5·8	8·0	4·7	10·3	8·2	5·6	4·9	5·1	7·3	7·8
11 ..	4·0	6·3	7·3	4·3	5·1	13·2	7·8	6·5	5·0	5·0	5·1	7·8
12 ..	6·7	6·9	8·2	5·9	5·1	14·5	7·5	6·5	4·2	5·7	5·3	6·5
13 ..	6·2	5·7	7·8	7·1	5·0	9·9	6·7	4·9	3·6	7·1	5·3	5·1
14 ..	7·7	5·1	6·2	5·3	5·4	8·9	8·4	4·6	3·8	4·8	4·7	5·9
15 ..	7·9	4·5	6·7	5·5	5·1	6·6	10·4	4·7	5·9	4·7	4·5	7·2
16 ..	6·5	7·0	5·4	4·9	5·9	7·0	9·2	4·0	4·5	4·0	4·0	7·0
17 ..	7·0	7·8	6·2	5·2	5·4	7·0	12·7	4·8	4·4	4·0	6·6	8·2
18 ..	6·4	6·7	7·8	5·7	5·2	5·5	16·6	5·6	3·4	4·2	6·1	8·0
19 ..	6·2	4·3	11·5	6·4	6·4	5·9	15·5	4·8	4·4	7·0	5·2	6·7
20 ..	4·9	3·3	8·1	6·1	5·1	6·5	9·7	4·9	4·4	7·4	6·2	6·7
21 ..	6·7	3·9	7·5	5·6	4·3	8·8	6·8	8·0	4·5	7·3	4·9	5·6
22 ..	6·7	8·2	7·9	5·6	4·7	8·1	8·0	12·8	5·1	5·4	5·5	5·9
23 ..	8·4	8·9	5·4	6·9	5·9	9·2	11·1	14·7	4·0	5·8	5·6	6·6
24 ..	6·0	7·1	2·7	6·2	8·9	8·2	12·9	15·7	4·3	5·2	4·4	6·6
25 ..	6·8	9·6	6·3	4·8	7·3	10·6	12·8	13·6	4·0	5·6	4·0	6·9
26 ..	6·0	10·5	9·3	7·2	6·4	13·4	10·7	8·2	5·2	5·7	5·6	6·2
27 ..	4·9	6·7	7·6	5·4	5·5	14·3	10·3	6·7	5·6	5·3	4·8	6·7
28 ..	4·7	6·7	7·3	6·2	4·9	11·8	11·4	9·3	5·0	4·5	3·6	4·2
29 ..	6·0		7·3	5·4	5·6	5·9	8·5	7·8	4·2	5·1	4·3	4·0
30 ..	6·2		5·7	6·2	5·2	4·2	9·5	7·5	3·7	5·2	4·4	3·9
31 ..	5·9		6·6		6·6		12·2	6·7		5·6		4·5
Monthly Mean.	6·0	6·3	6·7	5·8	5·6	8·7	9·3	8·5	5·7	5·3	5·3	6·1
Annual Variation.	− 0·6	− 0·3	+ 0·1	− 0·8	− 1·0	+ 2·1	+ 2·7	+ 1·9	− 0·9	− 1·3	− 1·3	− 0·5

Table VIb.—*Showing the Mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year* 1913, *and for the whole year.*

1913. Bombay Civil Time Hourly Intervals	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1	− 2·6	− 1·5	− 0·8	− 0·8	− 1·3	− 0·5	− 0·4	− 0·1	− 0·5	− 1·0	− 1·5	− 2·2	− 1·1
1 „ 2	− 2·6	− 1·4	− 0·2	− 1·5	− 1·2	− 0·4	− 0·1	+ 0·1	− 0·6	− 0·6	− 1·5	− 2·1	− 1·0
2 „ 3	− 2·0	− 1·9	− 1·4	− 2·7	− 1·6	+ 0·1	− 0·4	0·0	− 0·7	− 0·8	− 0·9	− 2·1	− 1·2
3 „ 4	− 1·5	− 1·5	− 2·0	− 3·2	− 1·5	− 0·4	− 0·1	+ 0·5	− 0·5	− 0·9	− 0·2	− 1·2	− 1·0
4 „ 5	− 1·0	− 1·3	− 2·3	− 3·2	− 1·7	0·0	+ 0·4	0·0	− 0·8	− 0·7	− 0·1	− 1·0	− 1·0
5 „ 6	+ 0·2	− 1·8	− 2·7	− 3·1	− 1·6	+ 0·4	− 0·1	− 0·1	− 0·4	− 0·5	+ 0·1	− 0·7	− 0·9
6 „ 7	+ 0·3	− 1·7	− 2·6	− 2·9	− 1·6	0·0	− 0·1	+ 0·1	− 0·7	− 0·4	+ 0·4	− 1·0	− 0·8
7 „ 8	+ 0·3	− 2·0	− 2·1	− 2·3	− 1·6	− 0·2	+ 0·2	− 0·2	− 0·7	− 0·3	+ 0·9	− 0·6	− 0·7
8 „ 9	+ 0·3	− 1·5	− 1·2	− 2·8	− 1·4	− 0·1	− 0·1	+ 0·1	− 0·5	− 0·3	+ 1·3	− 0·1	− 0·5
9 „ 10	+ 0·1	− 1·3	− 0·7	− 2·1	− 0·7	+ 0·4	+ 0·1	+ 0·2	− 0·8	− 0·5	+ 0·1	− 0·4	− 0·5
10 „ 11	− 0·7	− 1·2	− 0·4	− 0·4	− 0·1	− 0·1	− 0·6	+ 0·4	− 1·0	− 1·1	− 1·5	− 0·5	− 0·6
11 „ 12	− 1·5	− 0·4	+ 0·8	+ 0·9	+ 0·5	+ 0·4	− 0·4	+ 0·1	− 0·3	− 1·5	− 1·8	− 0·7	− 0·3
12 „ 13	− 1·2	+ 1·0	+ 2·2	+ 2·3	+ 1·5	+ 0·5	+ 0·1	+ 0·5	+ 0·6	− 0·7	− 1·2	− 0·1	+ 0·5
13 „ 14	+ 0·1	+ 2·1	+ 2·9	+ 3·5	+ 2·5	+ 0·4	+ 0·2	+ 0·4	+ 1·4	+ 0·9	+ 0·4	+ 0·8	+ 1·3
14 „ 15	+ 1·5	+ 2·7	+ 3·3	+ 4·4	+ 3·2	+ 0·6	0·0	+ 1·2	+ 2·1	+ 2·1	+ 1·5	+ 2·0	+ 2·0
15 „ 16	+ 2·4	+ 3·4	+ 3·6	+ 4·3	+ 3·6	+ 1·3	+ 0·7	+ 0·4	+ 2·4	+ 2·2	+ 2·2	+ 2·3	+ 2·4
16 „ 17	+ 2·6	+ 3·7	+ 3·2	+ 4·3	+ 3·3	+ 1·1	+ 1·0	+ 0·4	+ 2·1	+ 2·2	+ 2·1	+ 2·7	+ 2·4
17 „ 18	+ 3·0	+ 3·3	+ 2·6	+ 3·5	+ 2·7	− 0·3	+ 0·4	+ 0·1	+ 1·3	+ 1·9	+ 1·9	+ 2·7	+ 1·9
18 „ 19	+ 3·2	+ 2·5	+ 1·7	+ 2·0	+ 1·5	0·0	+ 0·2	− 0·8	+ 1·0	+ 1·7	+ 1·5	+ 2·8	+ 1·4
19 „ 20	+ 2·7	+ 1·7	+ 0·7	+ 0·4	+ 0·4	− 0·2	− 0·3	− 0·1	− 0·3	+ 0·7	+ 1·2	+ 2·3	+ 0·8
20 „ 21	+ 1·7	+ 0·8	− 0·4	− 0·1	− 0·7	− 0·5	− 0·2	− 0·8	− 0·9	− 0·1	− 0·4	+ 1·2	0·0
21 „ 22	− 0·7	− 0·4	− 0·9	− 0·1	− 1·2	− 0·8	− 0·4	− 0·6	− 1·0	− 0·7	− 1·3	− 0·2	− 0·7
22 „ 23	− 1·8	− 1·5	− 1·2	− 0·4	− 1·4	− 0·9	− 0·5	− 0·9	− 0·4	− 0·6	− 1·3	− 1·7	− 1·0
23 „ 24	− 2·3	− 1·8	− 1·2	− 0·4	− 1·5	− 0·7	− 0·4	− 0·7	− 1·0	− 0·7	− 1·5	− 2·0	− 1·2
Range.	5·8	5·7	6·3	7·6	5·3	2·2	1·6	2·1	3·4	3·7	4·0	5·0	3·6

	Miles.
The mean velocity for June to August ..	8·8
The mean velocity for September to May ..	5·9
The mean velocity for the year ..	6·6

Mean Daily Velocities of the North and East Components of the Wind, 1913.

Table VIc.—*Showing the Mean Velocities of the North or South and East or West Components of the Winds which blew on each day of the year* 1913.

In Miles per Hour.

1913. Date.	January. N. or S.	January. E. or W.	February. N. or S.	February. E. or W.	March. N. or S.	March. E. or W.	April. N. or S.	April. E. or W.	May. N. or S.	May. E. or W.	June. N. or S.	June. E. or W.	July. N. or S.	July. E. or W.	August. N. or S.	August. E. or W.	September. N. or S.	September. E. or W.	October. N. or S.	October. E. or W.	November. N. or S.	November. E. or W.	December. N. or S.	December. E. or W.
1 ..	2·5 N	1·0 E	0·8 N	0·9 W	3·8 N	2·9 W	3·3 N	4·7 W	1·0 N	4·5 W	2·3 N	6·1 W	4·4 S	1·1 W	4·1 S	12·1 W	2·3 N	8·4 W	4·0 N	2·3 W	3·4 N	1·5 E	5·1 N	0·3 W
2 ..	2·6 N	2·4 E	0·1 N	1·2 W	5·2 N	3·4 W	1·5 S	2·9 W	1·9 N	4·4 W	2·5 N	5·7 W	2·4 S	2·1 W	2·2 S	13·4 W	0·0	9·5 W	4·3 N	3·0 W	1·5 N	1·4 E	4·7 N	0·7 W
3 ..	2·9 N	1·2 E	3·2 N	1·7 W	4·3 N	2·8 W	2·9 S	0·8 W	2·0 S	3·7 W	0·9 N	6·5 W	1·6 S	1·0 W	2·6 S	11·1 W	2·5 S	11·9 W	4·3 N	2·3 W	1·1 N	0·3 E	2·1 N	0·3 E
4 ..	3·0 N	0·6 E	3·6 N	3·4 W	3·7 N	1·9 W	1·9 S	1·8 W	2·1 S	2·6 W	1·2 N	3·2 W	1·6 N	8·4 W	3·2 S	10·8 W	2·3 S	6·9 W	3·3 N	2·7 W	4·2 N	1·2 W	5·1 N	2·3 W
5 ..	3·0 N	0·5 E	5·7 N	2·8 W	5·6 N	2·2 W	2·1 N	4·4 W	3·8 S	3·2 W	3·5 S	1·2 E	0·9 S	6·5 W	4·5 S	9·4 W	1·2 S	9·8 W	3·0 N	1·7 W	4·2 N	0·4 W	6·9 N	2·3 W
6 ..	1·2 N	1·5 E	4·1 N	2·1 W	0·5 N	1·0 W	3·7 N	3·9 W	2·1 N	3·4 W	3·1 S	0·4 W	2·3 S	0·1 W	4·5 S	10·1 W	1·6 S	9·1 W	1·2 N	1·9 W	3·0 N	1·2 E	0·1 N	0·3 W
7 ..	3·7 N	1·2 E	4·1 N	1·8 W	1·7 N	2·0 W	2·3 N	4·4 W	1·8 N	3·7 W	7·2 S	2·3 E	1·0 S	1·7 W	5·0 S	8·4 W	2·4 S	7·5 W	1·2 S	1·9 W	2·3 N	0·3 E	1·3 N	0·7 W
8 ..	3·6 N	0·7 E	5·8 N	3·9 W	3·5 N	4·2 W	0·7 N	3·5 W	1·5 N	5·1 W	9·5 S	5·3 E	2·1 N	4·7 W	5·3 S	6·3 W	1·5 S	4·0 W	3·5 N	5·0 W	3·2 N	1·1 E	4·1 N	1·8 W
9 ..	3·1 N	0·4 E	3·7 N	2·3 W	2·9 N	3·4 W	4·0 N	4·0 W	0·9 N	4·7 W	9·0 S	5·4 W	2·1 S	4·6 W	4·0 S	5·1 W	0·1 N	4·7 W	0·1 N	2·9 W	2·5 N	0·7 E	5·1 N	2·8 W
10 ..	2·6 N	1·0 E	4·6 N	3·2 W	3·4 N	4·2 W	4·8 N	5·6 W	0·3 N	4·5 W	5·3 S	8·2 W	6·3 S	2·7 W	2·8 S	4·6 W	1·4 N	4·2 W	2·4 S	1·7 E	4·3 N	1·8 E	6·3 N	3·7 W
11 ..	1·5 N	1·0 E	4·6 N	2·7 W	6·2 N	2·8 W	0·3 S	3·2 W	0·2 N	5·0 W	6·9 S	10·1 W	4·4 S	6·2 W	2·9 S	5·5 W	2·0 N	3·7 W	0·4 N	1·8 E	2·1 N	0·5 E	6·5 N	3·2 W
12 ..	5·1 N	1·5 W	5·6 N	2·2 W	6·4 N	4·2 W	1·2 N	3·9 W	0·9 S	4·8 W	4·8 S	13·5 W	2·9 S	6·8 W	0·9 S	6·3 W	1·5 N	3·9 W	2·1 N	2·3 E	2·4 N	0·9 E	4·7 N	2·6 W
13 ..	4·0 N	1·2 W	4·3 N	1·2 W	4·5 N	4·9 W	4·8 N	4·3 W	2·0 S	4·4 W	3·3 S	9·3 W	3·5 S	5·6 W	0·1 N	4·9 W	0·7 N	2·1 W	5·7 N	0·1 E	3·1 N	0·1 W	2·2 N	1·1 W
14 ..	5·9 N	1·0 W	3·4 N	2·9 W	2·9 N	3·4 W	1·3 N	4·5 W	3·5 S	4·0 W	3·4 S	8·2 W	1·8 S	8·0 W	1·5 S	4·3 W	0·2 S	2·6 W	3·1 N	1·1 W	3·3 N	0·0	4·0 N	1·0 W
15 ..	7·1 N	1·2 W	0·9 N	2·6 W	4·0 N	4·6 W	2·1 N	4·0 W	2·7 S	4·1 W	2·9 S	5·7 W	2·8 S	9·8 W	1·0 S	4·5 W	2·3 N	5·2 W	2·5 N	0·3 W	1·7 N	0·3 E	6·0 N	0·8 W
16 ..	5·1 N	0·4 W	4·2 N	3·7 W	2·8 N	3·3 W	0·1 S	4·0 W	0·4 S	5·8 W	3·2 S	6·1 W	1·2 N	8·8 W	1·4 S	3·7 W	1·2 N	1·8 W	0·8 N	0·7 E	2·4 N	0·4 E	4·0 N	2·1 E
17 ..	4·2 N	1·1 E	6·0 N	1·5 W	2·2 N	3·5 W	2·0 N	4·8 W	0·1 S	5·4 W	2·9 S	6·3 W	1·5 N	12·4 W	1·9 S	4·0 W	1·5 N	0·4 W	0·1 S	0·9 W	2·6 N	1·8 E	5·4 N	2·9 E
18 ..	4·3 N	0·1 W	5·3 N	1·6 W	5·1 N	4·3 W	2·6 N	4·8 W	1·5 S	4·8 W	1·4 S	5·1 W	0·2 N	16·5 W	0·5 S	5·4 W	1·7 N	1·6 W	0·4 N	0·3 W	2·9 N	1·5 E	4·4 N	3·0 E
19 ..	3·1 N	0·7 E	2·1 N	1·0 W	9·8 N	5·2 W	2·3 N	4·5 W	3·6 S	5·1 W	1·6 S	4·5 W	5·9 S	13·9 W	0·4 S	4·6 W	2·1 N	3·0 W	5·2 N	1·5 W	2·2 N	0·6 E	3·8 N	2·2 E
20 ..	1·8 N	1·2 E	1·2 S	0·0	4·7 N	4·1 W	2·0 N	4·1 W	2·8 S	3·9 W	1·0 N	6·2 W	5·2 S	7·9 W	1·5 S	0·2 E	1·0 N	1·7 W	6·2 N	2·4 W	4·3 N	0·1 W	4·0 N	2·6 E
21 ..	5·1 N	1·2 W	0·1 S	1·5 W	6·0 N	3·2 W	0·6 N	4·8 W	0·2 N	3·1 W	2·1 N	8·4 W	3·4 S	5·7 W	0·5 N	6·4 W	1·0 N	1·6 W	5·4 N	2·4 W	3·9 N	0·1 E	1·5 N	2·1 E
22 ..	5·3 N	2·6 W	6·3 N	4·6 W	6·0 N	2·1 W	2·8 N	4·5 W	1·2 N	4·4 W	1·8 N	3·7 W	4·3 S	6·5 W	0·7 N	12·6 W	0·1 N	4·5 W	4·0 N	1·6 W	4·0 N	1·5 W	3·2 N	0·7 W
23 ..	7·1 N	2·8 W	7·0 N	4·6 W	1·9 N	2·3 W	3·8 N	5·0 W	2·0 N	5·1 W	0·7 S	6·2 W	5·1 S	9·7 W	0·2 N	14·6 W	1·5 S	1·5 W	4·1 N	0·9 E	4·5 N	1·5 W	5·6 N	2·1 W
24 ..	4·8 N	1·2 W	3·7 N	4·8 W	1·4 S	2·1 W	3·2 N	4·4 W	4·2 N	7·6 W	2·9 S	2·5 W	4·7 S	11·9 W	0·2 N	15·7 W	0·1 S	0·5 W	3·7 N	0·7 E	0·8 N	0·3 E	5·9 N	1·8 W
25 ..	4·4 N	0·3 E	7·7 N	4·6 W	3·9 N	4·3 W	1·5 N	4·3 W	2·9 N	6·7 W	3·3 S	9·1 W	3·5 S	12·0 W	3·6 S	12·8 W	1·6 N	2·1 W	3·9 N	1·2 W	1·3 N	0·4 E	5·9 N	2·5 W
26 ..	1·7 N	1·8 E	9·5 N	2·9 W	6·5 N	5·4 W	3·9 N	5·4 W	3·0 N	4·3 W	4·6 S	12·3 W	3·8 S	9·9 W	3·3 S	7·4 W	3·5 N	0·1 E	3·2 N	0·1 W	3·0 N	1·0 E	4·8 N	1·1 W
27 ..	0·0	1·0 E	5·4 N	2·3 W	5·1 N	4·3 W	2·7 N	3·7 W	1·5 N	3·6 W	0·8 S	9·8 W	5·9 S	8·1 W	3·9 S	5·0 W	3·3 N	0·7 E	3·5 N	0·7 E	1·0 N	1·2 E	4·6 N	0·1 E
28 ..	1·5 N	0·4 W	5·0 N	1·6 W	4·6 N	4·0 W	2·9 S	2·3 W	1·3 S	4·5 W	1·2 S	11·4 W	7·0 S	8·6 W	1·2 S	8·9 W	2·9 N	1·5 E	2·7 N	0·4 E	0·5 N	0·2 W	3·2 N	0·4 W
29 ..	4·3 N	1·3 W			4·9 N	4·0 W	1·5 S	4·3 W	1·7 S	5·1 W	3·1 S	4·7 W	3·5 S	7·7 W	0·7 S	7·7 W	0·3 N	1·0 E	2·9 N	0·5 E	0·7 S	0·2 W	0·5 S	1·0 E
30 ..	4·6 N	1·5 W			2·9 N	3·7 W	1·6 N	3·9 W	0·6 N	4·9 W	2·4 S	2·9 W	3·7 S	8·6 W	0·4 N	7·5 W	0·4 S	0·5 W	3·5 N	0·3 E	2·3 N	2·1 W	0·5 S	0·3 W
31 ..	4·3 N	1·8 W			1·9 N	3·7 W			2·9 N	5·8 W			4·5 S	11·4 W	1·8 N	6·2 W			2·3 N	1·5 E			2·7 N	1·7 W
Monthly Mean.	3·7 N	0·0	4·1 N	2·5 W	4·0 N	3·5 W	1·6 N	4·0 W	0·0	4·6 W	2·5 S	5·8 W	2·9 S	7·4 W	1·9 S	7·7 W	0·6 N	3·6 W	2·8 N	0·8 W	2·6 N	0·3 E	3·9 N	0·6 W
Annual Variation..	2·4 N	3·3 E	2·8 N	0·8 E	2·7 N	0·2 W	0·3 N	0·7 W	1·3 S	1·3 W	3·8 S	2·5 W	4·2 S	4·1 W	3·2 S	4·4 W	0·7 S	0·3 W	1·5 N	2·5 E	1·3 N	3·6 E	2·6 N	2·7 E

The Velocities of the Mean Components for the year are 1·3 N and 3·3 W.

TABLE VId.—*Showing the Mean diurnal inequality of the Velocity of the North or South and East or West Components of the Wind for each month of the year 1913 and for the whole year.*

In miles per hour.

1913. Bombay Civil Time Hourly Intervals.	Month. January. N. or S.	January. E. or W.	February. N. or S.	February. E. or W.	March. N. or S.	March. E. or W.	April. N. or S.	April. E. or W.	May. N. or S.	May. E. or W.	June. N. or S.	June. E. or W.	July. N. or S.	July. E. or W.	August. N. or S.	August. E. or W.	September. N. or S.	September. E. or W.	October. N. or S.	October. E. or W.	November. N. or S.	November. E. or W.	December. N. or S.	December. E. or W.	Year. N. or S.	Year. E. or W.
0 to 1	1·2 S	1·2 E	0·5 S	1·5 E	0·4 N	0·7 E	0·6 N	1·2 E	0·5 N	0·8 E	0·4 S	0·4 E	0·1 N	0·3 E	0·4 S	0·1 E	0·4 N	0·4 W	0·1 S	0·7 E	0·4 S	1·2 E	0·9 S	1·2 E	0·2 S	0·7 E
1 „ 2	1·6 S	1·8 E	0·5 S	1·2 E	0·9 N	0·9 E	0·7 N	2·2 E	0·7 N	1·0 E	0·2 N	0·7 E	0·4 S	0·5 E	0·4 S	0·0	0·0	0·1 W	0·3 N	0·7 E	0·7 S	1·4 E	1·0 S	1·2 E	0·1 S	1·0 E
2 „ 3	2·0 S	2·6 E	0·7 S	2·1 E	0·2 N	2·1 E	0·1 S	2·9 E	0·2 N	1·6 E	0·2 S	0·6 E	0·4 S	0·6 E	0·2 S	0·0	0·1 S	0·7 E	0·4 S	1·9 E	0·4 S	2·1 E	1·5 S	1·7 E	0·5 S	1·6 E
3 „ 4	1·1 S	2·9 E	0·4 S	2·1 E	0·2 S	2·7 E	0·3 S	3·4 E	0·2 N	1·8 E	0·3 S	1·2 E	0·1 N	1·1 E	0·4 S	0·2 W	0·2 S	0·7 E	0·2 N	1·2 E	0·5 S	3·4 E	1·1 S	2·4 E	0·3 S	1·9 E
4 „ 5	1·0 S	3·7 E	0·2 S	2·5 E	0·1 S	3·4 E	0·7 S	4·3 E	0·2 S	2·6 E	0·7 S	0·4 E	0·3 N	0·7 E	0·1 S	0·4 E	0·6 S	1·7 E	0·3 S	1·7 E	0·7 S	3·9 E	1·1 S	3·2 E	0·4 S	2·4 E
5 „ 6	0·6 S	4·5 E	1·0 S	3·0 E	1·0 S	4·5 E	1·0 S	4·4 E	0·6 S	2·9 E	0·1 N	0·3 E	0·2 S	0·8 E	0·0	0·1 E	0·2 S	1·8 E	0·5 S	3·1 E	0·7 S	4·4 E	1·2 S	4·0 E	0·6 S	2·8 E
6 „ 7	0·6 S	5·0 E	1·5 S	3·8 E	1·2 S	4·9 E	1·2 S	4·4 E	0·9 S	3·4 E	0·1 N	0·8 E	0·1 N	0·9 E	0·4 S	0·1 E	0·8 S	2·6 E	0·9 S	2·9 E	1·1 S	4·6 E	1·5 S	3·9 E	0·8 S	3·1 E
7 „ 8	1·2 S	5·3 E	1·5 S	4·0 E	1·3 S	5·6 E	1·1 S	4·2 E	0·9 S	3·3 E	0·0	1·4 E	0·1 S	0·7 E	0·1 N	0·2 E	0·5 S	2·4 E	1·1 S	3·8 E	1·1 S	5·1 E	1·5 S	4·5 E	0·8 S	3·4 E
8 „ 9	1·5 S	5·4 E	1·5 S	5·4 E	0·7 S	5·0 E	1·8 S	5·0 E	1·0 S	2·8 E	0·7 S	1·0 E	0·9 S	1·2 E	0·1 N	0·5 W	1·4 S	3·0 E	1·2 S	4·2 E	0·7 S	5·6 E	1·5 S	5·3 E	1·1 S	3·6 E
9 „ 10	2·0 S	5·3 E	1·3 S	4·3 E	0·4 S	2·5 E	1·7 S	1·7 E	0·9 S	1·0 E	0·0	0·4 W	0·5 S	0·3 E	0·1 S	0·4 W	1·5 S	2·9 E	1·2 S	3·9 E	1·2 S	4·6 E	1·5 S	5·1 E	1·0 S	2·6 E
10 „ 11	1·9 S	3·3 E	1·3 S	1·3 E	0·7 S	0·1 E	1·2 S	0·7 W	1·0 S	0·1 E	0·1 S	0·6 W	0·0	0·1 E	0·0	0·7 W	1·2 S	1·7 E	1·5 S	2·9 E	1·6 S	2·9 E	1·5 S	3·9 E	1·0 S	1·2 E
11 „ 12	1·3 S	0·6 E	1·3 S	0·7 W	0·5 S	2·6 W	0·8 S	2·3 W	0·6 S	1·0 W	0·1 S	0·1 E	0·5 S	0·1 W	0·0	0·4 W	0·8 S	0·3 E	1·3 S	1·0 E	1·4 S	1·5 E	0·7 S	0·1 E	0·8 S	0·3 W
12 „ 13	1·2 S	2·3 W	0·5 S	3·4 W	0·4 S	4·3 W	0·7 S	3·6 W	0·4 S	2·1 W	0·4 N	0·9 W	0·1 S	0·6 W	0·6 S	0·5 W	0·1 S	1·9 W	1·2 S	1·7 W	1·1 S	0·4 W	0·7 S	1·9 W	0·5 S	2·0 W
13 „ 14	0·6 S	4·5 W	0·2 S	4·5 W	0·1 N	4·8 W	0·1 S	4·8 W	0·1 S	3·2 W	0·4 N	0·8 W	0·2 N	0·9 W	0·1 N	0·7 W	0·4 N	2·9 W	0·3 S	4·2 W	0·5 S	2·9 W	0·1 S	3·3 W	0·1 S	3·1 W
14 „ 15	0·2 N	6·1 W	0·4 N	4·7 W	0·1 N	5·4 W	0·8 N	5·4 W	0·0	3·8 W	0·5 N	1·1 W	0·4 N	0·8 W	0·6 S	1·0 W	0·7 N	3·6 W	1·0 N	5·1 W	0·5 N	5·6 W	0·7 N	5·5 W	0·4 N	4·0 W
15 „ 16	1·0 N	6·5 W	1·1 N	5·3 W	0·9 N	5·1 W	1·0 N	5·1 W	0·4 N	4·2 W	0·8 N	1·5 W	0·9 N	1·2 W	0·7 N	0·6 W	0·2 N	3·5 W	1·3 N	5·0 W	1·1 N	6·5 W	1·1 N	5·6 W	0·9 N	4·2 W
16 „ 17	1·5 N	6·5 W	1·6 N	5·1 W	1·0 N	4·4 W	1·2 N	4·8 W	0·7 N	3·9 W	0·5 N	1·5 W	0·2 N	1·5 W	0·3 N	0·7 W	1·1 N	3·4 W	1·6 N	4·5 W	1·8 N	6·1 W	1·8 N	5·4 W	1·1 N	4·0 W
17 „ 18	3·0 N	5·6 W	2·7 N	3·8 W	1·4 N	3·6 W	1·0 N	4·2 W	1·0 N	3·3 W	0·3 N	1·1 W	0·4 N	1·0 W	0·4 N	0·2 W	1·5 N	1·5 W	1·1 N	3·3 W	1·9 N	5·6 W	2·4 N	4·8 W	1·4 N	3·2 W
18 „ 19	4·0 N	4·7 W	2·6 N	2·8 W	1·0 N	2·6 W	1·0 N	2·8 W	1·0 N	2·3 W	0·5 N	1·6 W	0·4 N	1·0 W	0·6 N	0·7 E	1·1 N	0·2 W	2·0 N	2·6 W	2·2 N	4·8 W	3·2 N	3·9 W	1·6 N	2·4 W
19 „ 20	4·0 N	3·9 W	2·3 N	1·8 W	0·9 N	1·4 W	1·1 N	1·0 W	0·6 N	1·2 W	0·1 S	0·0	0·7 N	0·6 W	0·3 N	0·2 E	1·2 N	0·3 W	1·7 N	1·3 W	2·6 N	3·7 W	3·4 N	3·2 W	1·6 N	1·5 W
20 „ 21	3·3 N	2·9 W	1·8 N	1·0 W	0·3 N	0·5 W	0·9 N	0·5 W	0·5 N	0·3 E	0·3 N	0·1 W	0·1 N	0·1 E	0·1 N	1·0 E	0·4 N	0·3 E	0·7 N	0·4 W	1·5 N	2·6 W	2·3 N	2·5 W	1·0 N	0·7 W
21 „ 22	1·3 N	0·7 W	1·0 N	0·2 E	0·1 N	0·5 E	0·9 N	0·1 E	0·2 N	0·7 E	0·7 S	0·7 E	0·3 N	0·1 W	0·6 N	0·9 E	0·6 N	0·5 E	0·1 N	0·1 W	0·8 N	1·7 W	1·1 N	1·3 W	0·5 N	0·0
22 „ 23	0·1 N	0·6 E	0·1 S	1·0 E	0·3 S	0·5 E	0·7 N	0·4 E	0·1 N	0·7 E	0·7 S	0·4 E	0·1 N	0·2 E	0·3 N	1·0 E	0·4 N	0·3 W	0·2 S	0·4 E	0·4 N	0·4 W	0·1 S	0·4 E	0·1 N	0·4 E
23 „ 24	0·7 S	1·2 E	0·5 S	1·0 E	0·0	0·6 E	0·5 N	1·2 E	0·2 N	0·9 E	0·4 S	0·6 E	0·7 S	0·5 E	0·1 S	0·7 E	0·1 N	0·1 E	0·1 S	0·4 E	0·2 S	0·3 E	0·5 S	0·6 E	0·2 S	0·7 E

Aggregate and Mean Velocities and Relative Frequency of Different Winds, 1913.

Table VIe.—*Showing for the year 1913 the sums of the Velocities, and the Mean Velocities, in miles per hour, of the Winds which blew in each Month, from each of the sixteen Principal Directions and also the number of hourly Observations which those sums comprise; the latter numbers indicating the Relative Frequency of the same Wind (as to direction) in the several Months, and of different Winds during the same Month.*

1913.	N.			N. N. E.			N. E.			E. N. E.			E.			E. S. E.			S. E.			S. S. E.		
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.
January ..	241	53	4·5	353	89	4·0	248	57	4·4	896	157	5·7	211	48	4·4	145	27	5·4	0	0	0·0	5	2	2·5
February ..	373	63	5·9	231	57	4·1	114	32	3·6	146	35	4·2	55	16	3·4	69	20	3·4	53	16	3·3	7	2	3·5
March ..	286	54	5·3	259	64	4·0	81	25	3·2	146	30	4·9	3	1	3·0	70	17	4·1	7	2	3·5	24	8	3·0
April ..	5	2	2·5	59	20	2·9	61	22	2·8	37	12	3·1	20	6	3·3	99	19	5·2	29	9	3·2	24	6	4·0
May ..	2	1	2·0	47	14	3·4	7	2	3·5	23	6	3·8	14	4	3·5	1	1	1·0	16	3	5·3	37	7	5·3
June ..	4	1	4·0	27	5	5·4	20	4	5·0	10	3	3·3	6	3	2·0	301	29	10.4	133	14	9·5	274	31	8·8
July ..	1	1	1·0	18	5	3·6	18	2	9·0	0	0	0·0	4	2	2·0	129	18	7·2	12	2	6·0	207	31	6·7
August ..	3	1	3·0	6	2	3·0	3	1	3·0	23	4	5·7	12	3	4·0	4	1	4·0	0	0	0·0	30	5	6·0
September ..	25	5	5·0	97	26	3·7	62	16	3·9	127	31	4·1	140	37	3·8	117	27	4·3	39	10	3·9	85	21	4·0
October ..	155	29	5·3	192	40	4·8	298	66	4·5	432	82	5·3	240	49	4·9	71	14	5·1	45	9	5·0	46	9	5·1
November ..	130	31	4·2	163	42	3·9	218	49	4·4	825	156	5·3	391	82	4·8	189	35	5·4	9	2	4·5	0	0	0·0
December ..	438	100	4·4	190	48	4·0	274	64	4·3	767	120	6·4	120	22	5·5	65	18	3·6	14	3	4·7	20	6	3·3
Year ..	1,663	341	4·9	1,642	412	4·0	1,404	340	4·1	3,432	636	5·4	1,216	273	4·5	1,260	226	5·6	357	70	5·1	759	128	5·9

1913.	S.			S. S. W.			S. W.			W. S. W.			W.			W. N. W.			N. W.			N. N. W.			Number of Observations.	
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Calm.	Variable.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.		
January ..	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	97	20	4·8	388	63	6·2	950	116	8·2	954	112	8·5	0	0
February ..	0	0	0·0	5	1	5·0	10	2	5·0	21	5	4·2	129	28	4·6	603	89	6·8	1,509	180	8·4	907	123	7·4	3	0
March ..	0	0	0·0	31	10	3·1	21	6	3·5	47	18	2·6	97	17	5·7	1,481	177	8·4	1,491	188	7·9	938	123	7·6	4	0
April ..	81	13	6·2	126	29	4·3	70	20	3·5	254	48	5·3	591	85	7·0	1,670	235	7·1	789	134	5·9	295	54	5·5	6	0
May ..	100	11	9·1	111	21	5·3	379	73	5·2	721	146	4·9	1,161	190	6·1	1,271	187	6·8	207	50	4·1	103	25	4·1	3	0
June ..	191	25	7·6	361	44	8·2	525	71	7·4	2,299	258	8·9	1,297	132	9·8	701	79	8·9	84	12	7·0	59	9	6·6	0	0
July ..	82	14	5·9	172	30	5·7	979	118	8·3	3,259	334	9·8	1,475	123	12·0	471	51	9·2	62	8	7·7	13	4	3·2	1	0
August ..	28	6	4·7	71	14	5·1	551	80	6·9	2,702	321	8·4	2,667	267	10·0	213	33	6·5	15	3	5·0	14	3	4·7	0	0
September ..	22	7	3·1	24	9	2·7	38	7	5·4	628	75	8·4	1,271	172	7·4	1,139	212	5·4	242	53	4·6	51	11	4·6	1	0
October ..	26	7	3·7	55	17	3·2	14	4	3·5	59	12	4·9	52	15	3·5	553	107	5·2	964	148	6·5	728	133	5·5	3	0
November ..	0	0	0·0	3	1	3·0	0	0	0·0	26	5	5·2	63	15	4·2	515	91	5·7	827	124	6·7	449	87	5·2	0	0
December ..	4	1	4·0	23	5	4·6	16	6	2·7	29	6	4·8	34	13	2·6	283	55	5·1	1,207	142	8·5	1,054	135	7·8	0	0
Year ..	534	84	6·4	982	181	5·4	2,603	387	6·7	10,045	1,228	8·2	8,934	1,077	8·3	9,288	1,379	6·7	8,347	1,158	7·2	5,565	819	6·8	21	0

Velocity of Wind, 1913.

Dines's Anemograph.

TABLE VI*f*.—*Mean Velocity of Wind in miles per hour for each day of Bombay Civil Time; also the Mean Monthly Velocity and its variation from the mean of the year.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	3·8	3·4	4·7	6·0	6·0	7·5	5·2	11·3	8·1	5·5	5·3	5·5
2 ..	6·2	2·9	6·5	3·6	5·8	7·5	4·1	11·9	8·4	5·3	4·6	4·9
3 ..	4·9	4·8	6·0	4·5	6·7	6·7	6·0	10·3	10·8	5·9	4·8	3·7
4 ..	4·5	4·7	4·4	4·8	4·7	7·0	8·1	10·1	6·6	4·7	5·4	5·9
5 ..	4·2	6·5	6·5	4·6	6·2	6·6	11·3	9 4	8·9	4·1	5·2	7·2
6 ..	4·0	4·9	2·6	6·0	5·0	4·8	4·2	10·2	8·9	3·1	5·4	2·8
7 ..	5·0	4·5	4·4	5·3	5·5	9·5	5·9	9·1	6·9	3·4	5·8	4·2
8 ..	5·0	6·6	5·0	5·0	5·5	13·5	6·2	8·0	5·2	6·1	4·9	4·0
9 ..	4·5	4·3	5·1	6·4	4·7	12·0	5·9	6·0	4·1	4·4	6·5	5·3
10 ..	4·3	5·2	4·9	7·7	4·6	9·8	8·0	5·0	4·7	5·0	6·4	6·8
11 ..	3·3	5·2	6·5	4·0	4·9	12·5	7·3	6·1	5·1	4·7	4·3	6·9
12 ..	6·0	6·0	7·4	6·0	5·0	12·9	6·8	5·8	4·4	5·2	4·6	5·7
13 ..	5·4	4·5	6·9	7·1	5·1	9·0	6·0	4·3	3·8	6·7	4·5	4·2
14 ..	6·9	4·0	5·6	5·5	5·7	7·7	7·5	4·0	3·9	4·3	4·1	5·1
15 ..	7·0	3·7	6·5	5·4	5·1	5·7	9·2	4·0	5·5	4·3	4·1	6·2
16 ..	5·7	6·0	4·8	4·7	5·6	5·9	8·5	3·4	4·1	3·6	3·5	6·1
17 ..	6·2	6·7	5·4	5·0	5·2	6·2	11·5	4·2	4·2	3·7	5 8	7·3
18 ..	5·8	5·7	7·2	5·6	5·0	5·2	14·7	4·8	3·2	3·9	5·4	7·1
19 ..	5·8	3·4	10·8	6·0	6·3	5·5	13·7	4·3	4·1	6·7	4·6	6·0
20 ..	4·2	2·4	7·4	5·7	5·0	5·9	9·2	4·9	4·1	7·0	5·2	5·8
21 ..	6·0	3·1	6·7	5·4	4·3	8·2	6·2	7·2	4·2	7·0	4·0	4·6
22 ..	6·0	7·4	7·1	5·4	4·8	7·5	7·6	11·5	4·7	4·9	4·9	5·1
23 ..	7·8	8·2	5·1	6·7	6·0	8·6	10·2	12·8	3·8	5·5	5·2	5·8
24 ..	5·2	6·3	2·4	6·0	9·0	7·9	11·5	13·8	4·3	4·8	3·8	5·9
25 ..	5·9	8·8	5·8	4·5	7·5	9·9	11·2	12·0	3·6	5·4	3·4	6·2
26 ..	4·9	9·6	8·7	6·8	6·5	11·7	9·6	7·2	4·7	5·6	4·7	5·3
27 ..	4·2	5·8	6·7	5·2	5·6	12·8	9·6	6·3	5·2	5·0	4·0	5·8
28 ..	3·9	5·5	6·2	6·3	4·9	10·5	10·7	8·2	4·7	4·5	3·0	3·4
29 ..	4·9		6·8	5·3	5·8	5·1	7·6	6·8	4·0	4·8	3·4	3·1
30 ..	5·4		5·1	6·2	5·4	3·6	8·3	6·7	3·6	5·0	3·6	2·8
31 ..	4·9		5·9		6·8		10·7	6·0		5·5		3·3
Monthly Mean	5·2	5·4	6·0	5·6	5·6	8·2	8·5	7·6	5·3	5·0	4·7	5·2
Annual Variation.	− 0·8	− 0·6	0·0	− 0·4	− 0·4	+ 2·2	+ 2·5	+ 1·6	− 0·7	− 1·0	− 1·3	− 0·8

TABLE VI*g*.—*Showing the Mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year 1913 and for the whole year.*

1913. Bombay Civil Time Hourly Intervals.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1	− 2·4	− 1·5	− 0·6	− 0·6	− 1·2	− 0·4	− 0·4	− 0·1	− 0·6	− 0·9	− 1·5	− 1·9	− 1·0
1 „ 2	− 2·5	− 1·4	− 0·4	− 1·6	− 1·1	− 0·4	− 0·2	− 0·1	− 0·7	− 0·7	− 1·2	− 2·0	− 1·0
2 „ 3	− 1·9	− 1·9	− 1·5	− 2·5	− 1·5	+ 0·2	− 0·1	+ 0·1	− 0·7	− 0·5	− 0·7	− 1·8	− 1·1
3 „ 4	− 1·5	− 1·5	− 2·0	− 3·0	− 1·5	− 0·2	0·0	+ 0·3	− 0·7	− 1·0	− 0·4	− 1·2	− 1·1
4 „ 5	− 1·0	− 1·5	− 2·5	− 3·2	− 1·5	0·0	+ 0·2	+ 0·1	− 0·7	− 0·7	− 0·1	− 1·0	− 1·0
5 „ 6	− 0·1	− 1·8	− 2·8	− 2·9	− 1·3	+ 0·3	0·0	− 0·3	− 0·4	− 0·6	+ 0·2	− 0·7	− 0·9
6 „ 7	+ 0·1	− 2·0	− 2·7	− 2·8	− 1·7	− 0·1	− 0·2	0·0	− 0·7	− 0·5	+ 0·3	− 0·8	− 0·9
7 „ 8	− 0·2	− 2·3	− 2·3	− 2·3	− 1·4	− 0·2	0·0	− 0·3	− 0·7	− 0·3	+ 0·9	− 0·6	− 0·8
8 „ 9	+ 0·1	− 1·7	− 1·5	− 2·5	− 1·3	− 0·1	0·0	0·0	− 0·4	− 0·4	+ 1·1	− 0·3	− 0·6
9 „ 10	− 0·2	− 1·4	− 0·8	− 2·1	− 0·8	+ 0·4	+ 0·2	0·0	− 0·7	− 0·5	+ 0·2	− 0·5	− 0·5
10 „ 11	− 0·6	− 1·0	− 0·4	− 0·5	− 0·2	− 0·1	− 0·4	+ 0·3	− 0·8	− 1·2	− 1·3	− 0·6	− 0·6
11 „ 12	− 1·4	− 0·4	+ 0·9	+ 0·7	+ 0·5	+ 0·4	− 0·3	+ 0·1	− 0·4	− 1·3	− 1·7	− 0·6	− 0·3
12 „ 13	− 1·0	+ 1·1	+ 1·9	+ 2·1	+ 1·5	+ 0·5	0·0	+ 0·6	+ 0·6	− 0·6	− 1·2	+ 0·1	+ 0·5
13 „ 14	+ 0·1	+ 1·9	+ 2·8	+ 3·2	+ 2·5	+ 0·5	+ 0·2	+ 0·6	+ 1·2	+ 0·6	+ 0·1	+ 0·6	+ 1·2
14 „ 15	+ 1·7	+ 2·7	+ 3·1	+ 3·8	+ 2·7	+ 0·7	+ 0·1	+ 1·0	+ 1·6	+ 1·9	+ 1·0	+ 1·6	+ 1·8
15 „ 16	+ 2·3	+ 3·4	+ 3·5	+ 4·2	+ 3·1	+ 1·0	+ 0·4	+ 0·5	+ 2·0	+ 2·1	+ 1·9	+ 2·3	+ 2·2
16 „ 17	+ 2·7	+ 3·7	+ 3·1	+ 4·1	+ 3·1	+ 1·3	+ 0·7	+ 0·3	+ 1·8	+ 2·1	+ 1·9	+ 2·5	+ 2·3
17 „ 18	+ 3·2	+ 3·3	+ 2·4	+ 3·3	+ 2·6	− 0·1	+ 0·5	+ 0·1	+ 1·4	+ 1·8	+ 1·6	+ 2·5	+ 1·9
18 „ 19	+ 3·2	+ 2·6	+ 1·6	+ 1·8	+ 1·6	− 0·1	+ 0·2	− 0·4	+ 0·9	+ 1·7	+ 1·6	+ 2·6	+ 1·4
19 „ 20	+ 2·7	+ 1·6	+ 0·7	+ 0·6	+ 0·4	+ 0·1	− 0·2	− 0·2	− 0·3	+ 0·8	+ 1·1	+ 2·4	+ 0·8
20 „ 21	+ 1·8	+ 1·0	− 0·4	− 0·2	− 0·5	− 0·5	− 0·3	− 0·6	− 0·6	0·0	− 0·5	+ 1·3	0·0
21 „ 22	− 0·5	− 0·5	− 0·8	− 0·2	− 0·8	− 0·9	− 0·2	− 0·5	− 0·8	− 0·5	− 1·2	− 0·2	− 0·6
22 „ 23	− 1·7	− 1·7	− 1·1	− 0·2	− 1·1	− 0·8	− 0·5	− 0·8	− 0·5	− 0·4	− 1·2	− 1·4	− 0·9
23 „ 24	− 2·1	− 1·9	− 1·0	− 0·1	− 1·3	− 0·5	− 0·4	− 0·6	− 0·7	− 0·6	− 1·3	− 1·8	− 1·0
Range.	5·7	6·0	6·3	7·4	4·8	2·2	1·2	1·8	2·8	3·4	3·6	4·6	3·4

	Miles.
The mean velocity for June to August ..	8·1
The mean velocity for September to May ..	5·3
The mean velocity for the year ..	6·0

Temperature of the Ground, 1913.

TABLE VIIa.—*Showing for each month the Mean Temperature of the Ground in the Thermometer Shed and the Annual Variation at the respective depths of 1, 9, 20, 60* and *132 inches below the surface.*

Depth.	1 inch.		*9 inches.		20 inches.		60 inches.		132 inches.	
Month.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.
	°	°	°	°	°	°	°	°	°	°
January ..	**76·5**	−4·7			80·2	−3·0	82·9	−1·0	83·9	+0·3
February	77·6	−3·6			**79·9**	−3·3	82·2	−1·7	83·7	+0·1
March ..	78·9	−2·3			80·3	−2·9	**81·9**	−2·0	**82·8**	−0·8
April ..	83·6	+2·4			83·1	−0·1	82·8	−1·1	82·9	−0·7
May ..	**87·1**	+5·9			85·9	+2·7	84·6	+0·7	83·5	−0·1
June ..	84·9	+3·7			**87·1**	+3·9	**86·4**	+2·5	84·0	+0·4
July ..	82·0	+0·8			85·3	+2·1	86·1	+2·2	**84·1**	+0·5
August ..	81·9	+0·7			84·0	+0·8	84·8	+0·9	83·9	+0·3
September	81·7	+0·5			83·7	+0·5	84·2	+0·3	83·8	+0·2
October ..	82·9	+1·7			84·1	+0·9	84·2	+0·3	83·8	+0·2
November	80·3	−0·9			83·4	+0·2	83·9	0·0	83·7	+0·1
December	77·4	−3·8			81·5	−1·7	83·4	−0·5	83·4	−0·2
Year. ..	81·2				83·2		83·9		83·6	

* This thermometer which was found broken in October 1912 was not replaced by a new one till March 1914.

TABLE VIIb.—*Showing for each of the five observation hours and for the mean of the day, the Temperature of the Ground exposed to the direct rays of the Sun at the depths of 1 in. and 8 inches below the surface.*

Depth from surface.	1 inch.						8 inches.					
Month.	Observation Hours.					Mean of five observation hours.	Observation Hours.					Mean of five observation hours.
	6	10	14	16	22		6	10	14	16	22	
	°	°	°	°	°	°	°	°	°	°	°	°
January ..	70·6	82·3	107·2	94·8	75·7	86·1	76·2	75·5	76·6	77·6	78·4	**76·8**
February	73·2	81·6	106·7	104·8	80·4	89·4	80·4	79·6	80·6	81·7	82·4	80·9
March ..	75·9	83·6	108·2	107·1	82·5	91·5	85·2	84·2	85·6	87·4	88·3	86·1
April ..	83·3	90·0	109·3	107·9	88·5	95·8	93·1	92·0	93·8	95·7	96·7	94·3
May ..	88·4	96·5	113·9	111·1	92·8	**100·5**	99·6	98·6	100·2	102·2	103·2	**100·8**
June ..	82·7	87·8	95·6	93·2	84·9	88·9	91·2	90·4	91·8	92·8	93·5	91·9
July ..	78·2	82·2	87·8	86·3	80·0	**82·9**	84·3	83·7	85·0	86·1	86·3	85·1
August ..	78·4	82·7	90·1	88·7	80·7	84·1	84·6	84·0	85·3	86·3	86·8	85·4
September	79·9	83·9	95·1	91·8	82·5	86·6	85·2	84·5	86·3	86·9	87·6	86·1
October ..	80·0	88·4	105·6	100·0	83·6	91·5	85·3	84·6	86·1	87·1	87·1	86·1
November	74·9	90·2	110·6	96·4	80·0	90·4	80·6	80·1	81·2	81·8	82·5	81·2
December	71·5	85·8	108·8	91·9	77·3	87·1	78·6	77·9	78·8	79·6	80·3	79·0
Year.	78·1	86·2	103·2	97·8	82·4	89·6	85·4	84·6	85·9	87·1	87·8	86·1

Maxima and Minima of different Meteorological Elements, 1913.

TABLE VIII.—*In which are collected the individual observations in each month of the year which showed the greatest and the least values of the following elements, viz., Height of Barometer corrected for Temperature, Temperature of Air, Pressure of Vapour and Additional Capacity of Air, and Ground Temperatures; 1 inch and 8 inches below the surface (exposed to Solar rays).*

1913.	Height of Barometer.			Temperature of Air.			Pressure of Vapour.			Additional Capacity.			Ground Thermometer 1 inch deep.			Ground Thermometer 8 inches deep.		
Month.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.
	In.	In.	In.	°	°	°	In.	In.	In.	In.	In.	In.	°	°	°	°	°	°
January ..	30·101	29·852	0·249	84·9	65·6	19·3	0·759	0·383	0·376	0·762	0·066	0·696	110·7	68·0	42·7	79·8	74·3	5·5
February ..	·062	·748	·314	84·9	64·0	20·9	·831	·271	·560	·656	·051	·605	109·2	69·0	40·2	84·8	76·9	7·9
March ..	29·993	·711	·282	86·1	68·7	17·4	·890	·373	·517	·593	·059	·534	110·0	71·5	38·5	92·0	79·8	12·2
April ..	·917	·652	·265	89·2	72·6	16·6	1·048	·675	·373	·643	·072	·571	111·5	77·0	34·5	100·7	87·8	12·9
May ..	·883	·575	·308	92·6	79·4	13·2	·019	·754	·265	·548	·117	·431	119·5	84·0	35·5	106·7	93·0	13·7
June ..	·872	·408	·464	93·1	74·0	19·1	·065	·762	·303	·566	·024	·542	119·1	74·5	44·6	106·7	76·4	30·3
July ..	·833	·451	·382	86·6	74·0	12·6	·013	·800	·213	·325	·020	·305	96·0	73·0	23·0	95·7	80·3	15·4
August ..	·876	·621	·255	85·6	74·9	10·7	0·974	·765	·209	·361	·036	·325	101·5	77·4	24·1	89·8	82·6	7·2
September ..	·918	·633	·285	87·0	75·5	11·5	1·054	·764	·290	·379	·034	·345	102·0	76·5	25·5	96·1	81·0	15·1
October ..	30·036	·628	·408	90·3	75·0	15·3	·116	·546	·570	·753	·050	·703	114·3	77·0	37·3	90·8	82·1	8·7
November ..	·037	·818	·219	89·7	70·6	19·1	0·896	·458	·438	·821	·079	·742	113·0	72·0	41·0	85·1	78·2	6·9
December ..	·220	·820	·400	87·2	63·8	23·4	·864	·384	·480	·732	·038	·694	113·5	65·2	48·3	82·1	74·9	7·2
Year.	30·220	29·408	·812	93·1	63·8	29·3	1·116	0·271	0·845	0·821	0·020	0·801	119·5	65·2	54·3	106·7	74·3	32·4

Relative Humidity of the Air, 1913.

TABLE IXa.—*Daily and Monthly Means of Observations taken at 6, 10, 14, 16 and 22 hours daily.*

Complete Saturation=1·000.

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	0·620	0·712	0·705	0·765	0·758	0·748	0·830	0·833	0·864	0·817	0·670	0·711
2	·589	·754	·655	·775	·789	·736	·827	·869	·918	·883	·730	·687
3	·642	·776	·746	·751	·752	·720	·852	·844	·872	·866	·699	·676
4	·676	·797	·723	·738	·761	·707	·865	·837	·848	·869	·793	·710
5	·675	·736	·616	·767	·733	·757	·872	·827	·834	·870	·739	·639
6	·641	·730	·655	·732	·745	·794	·890	·845	·824	·866	·615	·725
7	·652	·740	·733	·673	·733	·856	·834	·848	·806	·847	·681	·791
8	·633	·734	·758	·788	·727	·900	·897	·838	·837	·824	·723	·805
9	·589	·738	·759	·689	·716	·888	·905	·839	·791	·850	·650	·827
10	·652	·709	·732	·757	·716	·892	·855	·817	·817	·868	·634	·761
11	·647	·597	·778	·792	·687	·854	·839	·842	·759	·863	·701	·748
12	·729	·647	·674	·750	·665	·849	·847	·808	·755	·844	·719	·786
13	·718	·604	·685	·712	·689	·824	·822	·774	·791	·817	·698	·760
14	·743	·680	·778	·730	·699	·805	·875	·758	·774	·827	·709	·761
15	·671	·740	·704	·746	·705	·780	·826	·764	·748	·728	·716	·677
16	·596	·673	·740	·767	·708	·775	·888	·768	·854	·789	·682	·655
17	·663	·560	·793	·736	·707	·779	·867	·789	·838	·793	·624	·596
18	·651	·596	·762	·735	·703	·742	·936	·788	·859	·774	·671	·561
19	·685	·637	·578	·784	·677	·767	·921	·793	·865	·800	·701	·587
20	·670	·743	·595	·779	·712	·739	·860	·886	·918	·832	·693	·628
21	·732	·820	·589	·741	·728	·727	·843	·843	·857	·763	·693	·621
22	·749	·749	·615	·764	·719	·880	·859	·827	·809	·702	·696	·691
23	·596	·719	·719	·800	·721	·904	·875	·804	·798	·669	·646	·692
24	·627	·645	·808	·810	·731	·904	·865	·817	·779	·692	·697	·672
25	·697	·568	·715	·751	·741	·941	·864	·816	·769	·674	·707	·567
26	·619	·527	·719	·768	·739	·869	·852	·810	·806	·668	·706	·656
27	·713	·640	·761	·806	·738	·948	·887	·844	·859	·705	·656	·676
28	·721	·644	·747	·831	·724	·877	·885	·779	·839	·737	·710	·672
29	·633		·684	·802	·728	·854	·857	·777	·846	·694	·756	·746
30	·622		·719	·802	·740	·837	·847	·800	·867	·702	·781	·828
31	·647		·769		·728		·852	793		·695		·813
Monthly Mean.	0·661	0·686	0·710	0·761	0·723	0·822	0·864	0·815	0·827	0·785	0·697	0·701
Annual Variation.	− ·093	− ·068	− ·044	+ ·007	− ·031	+ ·068	+ ·110	+ ·061	+ ·073	+ ·031	− ·057	− ·053

Annual Mean .. 0·754

Extent of cloudy Sky, 1913.

TABLE IXb.—*Daily and Monthly Means of Observations taken at 6, 10, 14, 16 and 22 hours daily, the whole Sky being reckoned as 10·0.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	..	..	2·2	0·4	1·2	6·0	5·0	9·2	8·8	4·8	1·2	3·6
2	..	2·4	0·8	2·0	..	6·2	5·6	10·0	10·0	5·2	..	3·2
3	1·0	1·2	2·4	2·8	1·2	6·8	7·0	8·8	8·4	2·2	0·4	0·8
4	..	0·6	1·6	1·6	4·4	6·4	8·6	8·0	7·0	1·8	0·2	4·2
5	..	..	1·0	2·4	2·0	8·2	9·8	9·4	6·0	3·0	0·2	0·8
6	..	..	..	..	1·6	8·6	7·0	9·0	7·0	5·4	..	..
7	0·4	..	..	..	3·0	9·2	3·2	8·6	7·4	5·0	0·4	1·2
8	..	1·2	0·4	0·4	3·6	10·0	9·6	8·8	6·8	6·6	3·4	1·6
9	..	3·0	2·4	..	3·4	10·0	8·6	9·0	4·2	8·6	..	2·4
10	..	1·0	3·0	..	1·8	9·6	7·2	7·6	7·6	8·6	4·0	0·6
11	..	..	..	3·6	5·2	9·2	6·4	9·0	4·4	8·4	2·4	0·6
12	..	..	..	0·4	4·6	9·4	6·8	8·0	5·0	5·4	0·4	1·0
13	..	0·4	..	0·8	3·0	8·0	6·0	4·0	4·4	8·4	0·6	1·0
14	..	3·0	0·6	2·8	5·4	6·0	8·4	4·0	3·4	7·0	1·4	1·4
15	..	2·4	..	2·4	5·0	5·0	7·6	6·0	5·0	1·6	2·0	0·8
16	..	1·4	..	2·4	2·6	4·4	9·2	5·6	9·2	0·4	0·4	2·0
17	..	0·6	0·8	2·2	3·2	5·6	9·6	6·2	4·8	1·6	0·8	2·2
18	..	1·6	1·0	1·2	4·2	4·8	10·0	6·8	8·2	1·8	0·2	..
19	..	..	0·2	0·6	4·0	5·4	9·4	5·2	7·2	1·4	0·4	..
20	1·6	..	..	5·0	3·0	4·2	9·6	9·8	9·0	2·0	0·8	..
21	1·2	..	..	5·4	4·0	6·4	5·0	7·8	5·0	2·0	0·4	..
22	..	0·2	..	4·2	2·8	10·0	8·0	9·6	5·0	1·2	1·6	..
23	..	0·4	..	3·0	5·0	9·6	9·6	10·0	4·0	1·6	..	..
24	..	3·2	0·6	3·2	2·0	10·0	9·0	9·0	4·0	1·6	0·4	..
25	..	1·2	1·0	2·8	5·2	10·0	9·4	7·6	4·0	0·2	1·0	..
26	0·6	..	..	1·8	5·6	10·0	10·0	4·8	8·2	1·2	3·4	..
27	..	..	..	5·0	2·6	10·0	9·6	6·8	8·0	0·8	2·4	2·0
28	4·0	..	..	8·0	2·6	8·2	9·6	4·8	6·2	2·0	2·6	6·0
29	2·8		..	1·0	3·8	6·4	7·0	5·6	4·6	1·0	3·8	..
30	..		..	6·2	5·6	4·8	7·2	5·0	3·2	..	2·6	0·4
31	0·4		..		2·6		9·0	5·0		2·8		3·2
Monthly Mean.	0·4	0·8	0·6	2·4	3·4	7·6	8·0	7·4	6·2	3·3	1·2	1·3
Annual Variation.	− 3·1	− 2·7	− 2·9	− 1·1	− 0·1	+ 4·1	+ 4·5	+ 3·9	+ 2·7	− 0·2	− 2·3	− 2·2

For the days which have no entry 0·0 is to be understood.

Mean of the months, from January to April, November and December .. 1·1

Mean of the months from May to October .. .. .. 6·0

Mean for the year 3 5

Meteorological Data, 1913.

Table X.—Five-day Means, 1913.

Number of Five-day Period.	Barometric Pressure.	Temperature of the Air.	Pressure of Vapour.	Additional Capacity of the Air.	Rainfall.*	North or South Component of Wind.	East or West Component of Wind.	Number of Five-day Period.	Barometric Pressure.	Temperature of the Air.	Pressure of Vapour.	Additional Capacity of the Air.	Rainfall.*	North or South Component of Wind.	East or West Component of Wind.
	In.	°	In.	In.	In.	Miles.	Miles.		In.	°	In.	In.	In.	Miles.	Miles.
1	29·969	75·3	0·601	0·286	....	2·8 N	1·1 E	38	29·670	79·7	0·899	0·117	**15·34**	0·8 S	3·5 W
2	·942	75·3	·585	·300	....	2·8 N	1·0 E	39	·683	82·1	·937	·160	1·84	3·8 S	5·9 W
3	·951	**72·9**	·779	·234	....	4·7 N	0·8 W	40	·540	80·7	·927	·122	9·62	1·2 S	**12·3** W
4	·987	74·7	·581	·287	....	3·7 N	0·5 E	41	·680	81·2	·915	·151	2·79	4·5 S	8·3 W
5	·961	73·1	·575	·245	....	5·3 N	1·5 W	42	·625	80·8	·915	·136	2·01	4·7 S	9·3 W
6	30·006	74·9	·610	·260	....	2·4 N	0·1 W	43	·675	81·2	·911	·154	0·62	3·4 S	11·3 W
7	29·985	74·9	·658	·213	....	2·4 N	1·8 W	44	·713	80·7	·890	·158	0·72	4·5 S	9·0 W
8	·946	76·1	·681	·224	....	4·7 N	2·6 W	45	·745	81·3	·884	·187	0·16	2·1 S	5·3 W
9	·905	75·4	·592	·292	....	4·5 N	2·4 W	46	·753	81·3	·833	·236	0·18	1·3 S	4·4 W
10	·877	75·9	·599	·302	....	3·7 N	2·1 W	47	·733	79·6	·843	·169	1·62	0·1 S	7·6 W
11	·866	76·3	·680	·232	....	3·3 N	3·1 W	48	·766	80·7	·861	·186	0·50	2·4 S	10·0 W
12	·886	73·6	**·505**	·332	....	**6·3** N	2·9 W	49	·756	80·3	·859	·178	1·58	0·8 N	7·9 W
13	·890	75·1	·613	·263	....	3·9 N	2·3 W	50	·775	80·2	·881	·151	0·72	2·0 S	9·0 W
14	·876	75·5	·675	·211	....	3·5 N	3·3 W	51	·830	80·2	·828	·205	0·28	0·7 N	4·1 W
15	·831	76·0	·662	·241	....	4·1 N	4·1 W	52	·830	80·4	·839	·200	0·29	1·1 N	2·4 W
16	·877	76·3	·619	·291	....	5·6 N	4·1 W	53	·831	81·2	·919	·147	2·63	1·2 N	2·5 W
17	·852	78·6	·720	·262	....	3·4 N	3·2 W	54	·832	80·8	·853	·203	0·23	1·4 N	0·7 W
18	·880	78·0	·736	·227	....	3·9 N	3·9 W	55	·792	82·1	·942	·157	....	2·2 N	0·7 W
19	·835	78·8	·769	·219	....	0·2 S	2·9 W	56	·813	83·6	**1·006**	·147	0·02	2·1 N	2·1 W
20	·799	81·1	·802	·266	....	3·1 N	4·3 W	57	·772	81·3	0·925	·151	2·20	0·7 N	0·4 W
21	·797	82·4	·847	·265	....	1·8 N	4·0 W	58	·792	80·8	·858	·197	0·15	2·4 N	0·3 W
22	·790	81·8	·845	·245	....	1·8 N	4·4 W	59	·943	80·9	·832	·228	....	4·2 N	1·6 W
23	·747	81·8	·862	·229	....	2·4 N	4·6 W	60	·920	82·4	·760	·353	....	3·7 N	0·2 E
24	·746	83·8	·948	·214	....	0·8 N	3·9 W	61	·876	80·9	·756	·304	....	3·0 N	0·8 E
25	·770	84·4	·920	·264	....	1·0 S	3·7 W	62	·912	80·0	·752	·279	....	2·8 N	0·3 E
26	·775	84·2	·876	·302	....	1·3 N	4·3 W	63	·921	79·3	·697	·311	....	2·9 N	0·9 E
27	·786	85·4	·863	**·363**	....	1·8 S	4·5 W	64	·932	77·7	·701	·255	....	2·6 N	0·3 E
28	·777	85·5	·881	·347	....	1·7 S	5·0 W	65	·951	78·1	·667	·304	....	3·2 N	0·8 E
29	·754	85·5	·911	·316	....	2·1 N	5·4 W	66	·937	77·7	·694	·263	....	2·7 N	0·3 W
30	·708	87·3	·971	·327	....	0·4 N	4·5 W	67	·898	78·8	·740	·248	....	1·6 N	0·3 W
31	·607	**87·5**	·971	·336	0·01	2·0 N	5·5 W	68	·924	75·9	·630	·272	....	3·8 N	1·1 W
32	**·489**	83·6	·966	·190	4·19	**6·5** S	0·6 E	69	·928	77·9	·766	·193	....	4·7 N	2·4 W
33	·557	83·2	·971	·169	2·59	4·7 S	9·9 W	70	·894	75·7	·661	·234	....	4·2 N	0·7 W
34	·720	84·8	·936	·262	0·10	2·4 S	5·5 W	71	·960	76·2	·564	·248	....	3·8 N	**2·6** E
35	·755	80·6	·972	·182	5·99	0·3 N	5·4 W	72	30·027	72·9	·551	·265	....	5·1 N	1·6 W
36	·634	80·6	·942	**·104**	12·88	2·6 S	9·5 W	73	**·076**	73·4	·633	·197	....	1·9 N	0·3 W
37	·764	82·3	·934	·171	1·70	1·8 S	3·1 W								

* Five-day sums, *not means*.

Barometric Pressure, 1914.

TABLE Ia.—*Daily and Monthly Means.*

Height of the Barometer above mean sea-level=37 feet.

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	30·118	29·993	29·980	29·786	29·771	29·762	29·632	29·616	29·827	29·841	29·895	29·854
2 ..	·081	·918	·961	·816	·799	·760	·605	·623	·817	·825	·888	·885
3 ..	·042	·942	·960	·881	·808	·721	·603	·642	·806	·867	·837	·915
4 ..	·025	·963	·900	·885	·795	·661	·610	·674	·772	·870	·819	·917
5 ..	·023	·943	·828	·850	·766	·670	·609	·719	·708	·827	·834	·914
6 ..	·038	·936	·841	·826	·726	·728	·648	·740	·724	·800	·844	·886
7 ..	·072	·934	·861	·855	·729	·734	·667	·715	·757	·823	·850	·883
8 ..	·090	·927	·887	·884	·771	·682	·626	·720	·732	·901	·864	·866
9 ..	·083	·950	·895	·912	·789	·679	·584	·785	·717	·894	·863	·887
10 ..	·087	·970	·895	·935	·775	·707	·576	·809	·747	·887	·855	·892
11 ..	·057	·969	·886	·915	·755	·746	·609	·755	·765	·893	·869	·900
12 ..	·022	·934	·874	·894	·784	·706	·629	·728	·725	·880	·856	·867
13 ..	29·994	·965	·913	·897	·780	·628	·641	·695	·626	·872	·858	·891
14 ..	·973	·992	·936	·873	·724	·609	·661	·672	·554	·904	·857	·905
15 ..	·985	·978	·895	·893	·692	·591	·682	·649	·541	·890	·835	·908
16 ..	·983	·927	·867	·882	·716	·639	·699	·662	·546	·856	·825	·919
17 ..	·975	·913	·875	·860	·781	·647	·617	·631	·617	·872	·829	·923
18 ..	·986	·971	·966	·842	·854	·639	·571	·649	·735	·928	·820	·938
19 ..	·983	·965	30·007	·839	·877	·633	·588	·711	·853	·945	·834	·902
20 ..	·953	·922	29·951	·881	·840	·596	·587	·749	·895	·923	·880	·847
21 ..	·924	·971	·896	·872	·840	·580	·556	·708	·875	·897	·908	·872
22 ..	·945	·927	·895	·846	·840	·625	·545	·710	·863	·893	·885	·911
23 ..	·957	·895	·881	·836	·827	·698	·548	·716	·860	·909	·890	·972
24 ..	·962	·926	·879	·815	·789	·716	·571	·711	·834	·932	·927	·997
25 ..	·961	·925	·859	·844	·777	·655	·632	·720	·830	·954	·939	30·014
26 ..	·943	·898	·862	·834	·789	·566	·664	·734	·833	·923	·965	·005
27 ..	·953	·891	·847	·809	·776	·511	·617	·770	·811	·884	·995	·005
28 ..	·935	·950	·827	·804	·730	·585	·592	·769	·823	·888	·969	·020
29 ..	·924		·855	·754	·738	·626	·605	·784	·877	·915	·913	·011
30 ..	·959		·881	·757	·780	·670	·608	·826	·886	·909	·866	29·981
31 ..	30·007		·816		·789		·606	·829		·902		·961
Monthly Mean.	30·001	29·943	29·893	29·853	29·781	29·659	29·613	29·717	29·765	29·887	29·876	29·924
Annual Variation.	+·175	+·117	+·067	+·027	−·045	−·167	−·213	−·109	−·061	+·061	+·050	+·098

Annual Mean .. .. .. In. 29·826

TABLE Ib.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0·001 inch.

1914. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
0 7	+ 7	+ 10	+ 9	+ 8	+ 4	+ 10	+ 12	+ 5	+ 5	+ 3	+ 6	+ 2	+ 7
1 7	− 3	− 3	− 5	− 6	− 9	− 6	− 7	− 11	− 7	− 11	− 7	− 8	− 7
2 7	− 19	− 18	− 17	− 21	− 22	− 20	− 22	− 27	− 22	− 23	− 18	− 20	− 21
3 7	− 25	− 25	− 22	− 27	− 23	− 24	− 29	− 32	− 28	− 23	− 23	− 28	− 26
4 7	− 24	− 26	− 22	− 23	− 19	− 24	− 28	− 31	− 28	− 20	− 20	− 25	− 24
5 7	− 14	− 18	− 12	− 9	− 8	− 16	− 20	− 23	− 17	− 6	− 9	− 16	− 14
6 7	+ 2	+ 1	+ 7	+ 6	+ 9	0	− 5	− 10	− 4	+ 10	+ 11	0	+ 2
7 7	+ 25	+ 22	+ 30	+ 28	+ 31	+ 16	+ 9	+ 7	+ 14	+ 32	+ 33	+ 21	+ 22
8 7	+ 47	+ 41	+ 51	+ 49	+ 45	+ 27	+ 21	+ 22	+ 33	+ 49	+ 54	+ 46	+ 40
9 7	+ 64	+ 56	+ 63	+ 58	+ 54	+ 36	+ 29	+ 33	+ 44	+ 61	+ 68	+ 62	+ 52
10 7	+ 61	+ 60	+ 64	+ 55	+ 49	+ 32	+ 33	+ 35	+ 46	+ 57	+ 61	+ 59	+ 51
11 7	+ 41	+ 45	+ 49	+ 45	+ 41	+ 28	+ 30	+ 31	+ 40	+ 39	+ 38	+ 42	+ 39
12 7	+ 11	+ 17	+ 22	+ 23	+ 25	+ 16	+ 19	+ 19	+ 21	+ 9	+ 6	+ 11	+ 17
13 7	− 19	− 10	− 7	− 5	+ 2	+ 2	+ 7	+ 4	− 8	− 17	− 25	− 21	− 8
14 7	− 42	− 35	− 31	− 30	− 21	− 15	− 12	− 13	− 31	− 40	− 49	− 41	− 30
15 7	− 49	− 50	− 51	− 47	− 39	− 29	− 24	− 26	− 44	− 53	− 60	− 50	− 43
16 7	− 48	− 51	− 55	− 55	− 51	− 37	− 33	− 33	− 47	− 55	− 57	− 48	− 47
17 7	− 37	− 42	− 50	− 51	− 49	− 36	− 30	− 30	− 39	− 45	− 45	− 38	− 41
18 7	− 25	− 30	− 41	− 37	− 38	− 23	− 21	− 19	− 23	− 30	− 28	− 23	− 28
19 7	− 6	− 12	− 23	− 16	− 21	− 7	− 6	− 3	− 4	− 11	− 6	− 3	− 10
20 7	+ 10	+ 9	− 4	− 1	− 5	+ 9	+ 9	+ 13	+ 12	+ 10	+ 15	+ 15	+ 8
21 7	+ 20	+ 22	+ 12	+ 16	+ 12	+ 19	+ 19	+ 26	+ 28	+ 22	+ 23	+ 26	+ 20
22 7	+ 19	+ 25	+ 17	+ 23	+ 19	+ 25	+ 27	+ 33	+ 28	+ 21	+ 23	+ 25	+ 24
23 7	+ 12	+ 19	+ 12	+ 19	+ 16	+ 21	+ 23	+ 27	+ 19	+ 18	+ 15	+ 15	+ 18
Range.	113	111	119	113	105	73	66	68	93	116	128	112	99

Temperature of the Air, 1914.

TABLE IIa.—*Daily and Monthly Means.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	**74·0**	73·8	74·9	79·4	84·4	86·8	84·6	79·5	82·1	83·2	83·2	78·1
2 ..	74·3	74·6	75·0	79·3	**84·0**	86·5	**85·0**	80·8	81·9	83·2	83·4	80·4
3 ..	74·7	74·6	76·1	79·5	84·5	86·3	83·6	80·9	81·9	82·6	83·3	**80·5**
4 ..	76·0	74·6	76·3	79·3	85·2	86·7	84·7	80·4	81·3	82·9	84·1	79·4
5 ..	75·1	75·0	76·8	79·2	84·9	87·3	84·1	80·8	82·1	82·9	81·5	77·8
6 ..	76·1	75·0	76·9	79·7	85·4	**87·5**	83·7	79·7	80·3	83·0	80·8	78·3
7 ..	**77·2**	75·4	76·3	80·3	85·7	87·0	82·7	79·9	81·7	82·4	83·2	76·9
8 ..	76·4	76·5	76·4	79·9	85·7	86·3	82·6	81·1	81·2	82·4	83·2	77·2
9 ..	77·2	75·9	76·3	79·2	85·8	86·5	82·4	80·6	81·6	84·0	83·0	77·1
10 ..	76·4	75·2	76·5	**78·8**	86·1	86·6	83·0	80·6	82·1	85·0	83·8	76·9
11 ..	75·9	74·8	76·5	79·1	85·5	86·9	83·4	80·5	82·2	84·5	84·4	76·0
12 ..	75·9	74·7	76·5	80·1	85·1	85·5	83·7	81·2	79·1	83·4	**84·5**	**73·0**
13 ..	76·2	76·2	76·0	79·3	84·5	83·3	83·3	**78·7**	79·5	83·0	84·1	75·3
14 ..	76·5	**76·8**	76·0	79·7	85·4	83·8	82·3	79·5	**78·3**	83·2	83·4	75·5
15 ..	75·3	75·9	77·1	79·5	86·1	85·0	83·1	80·4	78·6	83·4	82·2	76·2
16 ..	75·9	73·6	77·0	80·8	86·2	81·6	82·6	81·2	78·4	83·2	81·0	76·6
17 ..	76·4	73·3	76·6	81·5	85·7	82·2	80·8	80·8	80·3	83·6	80·9	76·4
18 ..	76·8	71·4	76·6	80·6	85·4	82·1	82·8	81·0	80·5	83·3	81·2	75·8
19 ..	76·9	**70·6**	75·1	80·5	85·0	81·6	82·6	80·5	80·2	84·3	82·0	75·2
20 ..	76·2	75·5	**73·8**	80·6	84·8	81·1	80·9	79·8	80·9	83·4	81·8	76·8
21 ..	75·8	75·8	74·8	81·5	85·1	**80·1**	81·1	80·8	80·2	84·1	80·8	77·0
22 ..	74·7	75·4	76·0	82·7	85·5	80·1	81·8	80·3	80·8	**85·5**	80·9	75·0
23 ..	75·2	76·1	76·7	83·0	85·3	82·9	77·6	80·0	80·3	85·4	79·8	74·8
24 ..	75·5	75·6	77·3	82·6	85·3	84·5	78·4	80·9	80·4	83·6	80·0	74·5
25 ..	76·1	75·0	77·8	82·7	85·0	84·3	**77·3**	80·8	81·9	82·4	78·4	74·1
26 ..	75·6	75·8	78·2	83·1	85·8	81·9	79·6	81·4	82·2	**81·9**	79·2	73·3
27 ..	75·6	75·2	78·3	83·4	86·4	81·4	80·8	81·4	80·7	82·5	79·7	74·0
28 ..	74·8	75·8	79·6	83·9	86·2	83·9	79·7	81·6	81·1	83·6	79·5	74·6
29 ..	74·9		**81·0**	83·4	**86·5**	84·7	78·8	81·8	82·9	83·7	78·5	74·8
30 ..	74·1		80·7	**84·1**	86·5	84·8	77·3	**82·3**	**83·1**	83·5	**78·2**	74·4
31 ..	74·1		80·3		86·4		78·0	82·1		82·8		77·0
Monthly Mean.	75·7	**74·9**	76·9	80·9	**85·5**	84·3	81·7	80·7	80·9	83·4	81·7	76·2
Annual Variation.	− 4·5	− 5·3	− 3·3	+ 0·7	+ 5·3	+ 4·1	+ 1·5	+ 0·5	+ 0·7	+ 3·2	+ 1·5	− 4·0

Annual Mean .. .. ..80·2°

TABLE IIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

1914. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
0 2	− 2·5	− 2·1	− 2·2	− 2·2	− 2·3	− 1·6	− 0·4	− 1·1	− 1·1	− 2·3	− 2·4	− 2·4	− 1·9
1 2	− 3·0	− 2·8	− 2·5	− 2·6	− 2·5	− 1·6	− 0·7	− 1·3	− 1·4	− 2·6	− 2·9	− 2·9	− 2·2
2 2	− 3·3	− 2·9	− 2·8	− 2·8	− 2·7	− 1·7	− 0·7	− 1·3	− 1·6	− 2·9	− 3·3	− 3·2	− 2·4
3 2	− 3·6	− 3·2	− 3·2	− 3·2	− 2·8	− 1·8	− 0·9	− 1·4	− 1·7	− 3·0	− 3·6	− 3·5	− 2·7
4 2	− 3·8	− 3·6	− 3·5	− 3·4	− 2·9	− 2·0	− 1·1	− 1·3	− 1·6	− 3·3	− 3·7	− 3·8	− 2·8
5 2	− 4·4	− 4·0	− 4·0	− 3·7	− **3·1**	− **2·1**	− **1·3**	− **1·4**	− **1·8**	− 3·5	− 4·1	− 4·5	− 3·2
6 2	− 4·7	− 4·3	− **4·2**	− **3·8**	− 2·9	− 1·9	− 1·3	− 1·4	− 1·7	− **3·8**	− **4·3**	− **4·8**	− **3·3**
7 2	− **5·1**	− **4·5**	− 4·0	− 2·5	− 1·8	− 1·7	− 0·8	− 1·2	− 1·3	− 3·3	− 4·1	− 4·8	− 2·9
8 2	− 3·8	− 3·0	− 2·0	− 1·0	− 0·3	− 0·9	− 0·2	− 0·8	− 0·5	− 2·1	− 2·7	− 3·4	− 1·7
9 2	− 2·1	− 0·9	− 0·2	+ 0·2	+ 0·9	+ 0·2	+ 0·4	− 0·1	0·0	− 0·7	− 1·1	− 1·6	− 0·4
10 2	+ 0·3	+ 1·4	+ 2·0	+ 1·8	+ 2·3	+ 1·5	+ 0·7	+ 0·9	+ 0·8	+ 1·1	+ 1·0	+ 0·8	+ 1·2
11 2	+ 2·4	+ 3·1	+ 3·4	+ 3·0	+ 3·1	+ 2·2	+ 0·8	+ 1·6	+ 1·6	+ 2·7	+ 2·9	+ 2·9	+ 2·5
12 2	+ 4·9	+ 4·5	+ 4·3	+ 4·1	+ 3·7	+ 3·2	+ 1·1	+ 1·9	+ 2·3	+ 4·3	+ 4·9	+ 4·7	+ 3·7
13 2	+ 6·2	+ 5·0	+ 4·8	+ 4·6	+ 4·0	+ 3·3	+ 0·9	+ 1·9	+ 2·4	+ 5·1	+ 6·0	+ 6·0	+ 4·2
14 2	+ **6·7**	+ **5·2**	+ **5·2**	+ **5·0**	+ **4·3**	+ **3·3**	+ **1·4**	+ **2·2**	+ **2·9**	+ **5·4**	+ **6·0**	+ **6·2**	+ **4·5**
15 2	+ 6·5	+ 4·8	+ 4·9	+ 4·7	+ 4·0	+ 2·6	+ 0·8	+ 2·2	+ 2·6	+ 4·9	+ 5·7	+ 6·2	+ 4·2
16 2	+ 5·6	+ 4·5	+ 4·1	+ 3·9	+ 3·4	+ 2·0	+ 1·1	+ 1·7	+ 2·1	+ 4·0	+ 4·4	+ 5·2	+ 3·5
17 2	+ 3·6	+ 3·2	+ 2·8	+ 2·6	+ 2·0	+ 1·4	+ 0·7	+ 0·9	+ 1·4	+ 2·5	+ 2·6	+ 3·2	+ 2·2
18 2	+ 1·9	+ 1·6	+ 0·9	+ 0·7	+ 0·2	+ 0·4	+ 0·3	+ 0·3	+ 0·4	+ 1·2	+ 1·3	+ 1·9	+ 0·9
19 2	+ 1·0	+ 0·9	0·0	− 0·5	− 0·9	− 0·4	− 0·1	− 0·1	− 0·2	+ 0·4	+ 0·8	+ 1·2	+ 0·2
20 2	+ 0·4	+ 0·4	− 0·4	− 0·8	− 1·3	− 0·6	− 0·1	− 0·3	− 0·5	0·0	+ 0·3	+ 0·6	− 0·2
21 2	− 0·3	− 0·2	− 0·8	− 1·2	− 1·5	− 1·2	− 0·1	− 0·6	− 0·7	− 0·7	− 0·6	− 0·2	− 0·7
22 2	− 1·2	− 0·9	− 1·3	− 1·4	− 1·7	− 1·2	− 0·4	− 0·6	− 0·8	− 1·3	− 1·6	− 1·2	− 1·1
23 2	− 2·2	− 1·6	− 1·8	− 1·8	− 2·0	− 1·3	− 0·5	− 0·9	− 1·0	− 1·9	− 2·2	− 1·9	− 1·6
Range.	11·8	9·7	9·4	8·8	7·4	5·4	2·7	3·6	4·7	9·2	10·3	11·0	7·8

Temperature of the Air, 1914.

TABLE IIc.—*Showing the maximum temperature of the Air on each day during the year 1914.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	80·0	81·4	82·3	86·7	90·7	93·3	88·6	82·2	87·2	88·7	92·2	86·3
2 ..	82·5	82·9	81·7	86·1	91·0	92·6	**89·4**	83·4	87·4	89·3	92·9	**89·9**
3 ..	84·0	82·4	83·1	88·4	91·3	92·6	88·0	84·0	87·9	89·7	92·6	89·6
4 ..	84·5	83·1	86·7	87·1	91·8	92·4	88·8	83·0	87·0	90·4	92·5	88·1
5 ..	81·1	83·6	85·6	86·5	91·2	93·4	87·6	83·1	88·1	90·2	88·2	87·6
6 ..	84·1	83·8	84·3	85·3	91·2	**93·7**	87·1	83·1	82·5	89·3	85·0	88·2
7 ..	86·2	82·8	84·1	86·1	91·6	93·0	85·1	84·1	87·0	88·7	89·7	85·6
8 ..	85·6	84 9	84·0	86·4	91·4	92·6	87·0	85·3	85·0	88·8	89·9	86·9
9 ..	**87·3**	84·6	83·2	86·8	91·2	92·4	84·0	85·0	85·4	90·5	90·4	84·4
10 ..	86·2	84·2	83·9	86·4	92·4	93·0	85·9	85·1	87·4	93·1	93·0	84·5
11 ..	86·0	82·4	83·3	86·1	92·6	92·9	88·5	85·0	88·1	93·2	**93·2**	84·1
12 ..	86·0	84·4	83·3	86·9	92·5	93·1	87·4	86·0	83·0	90·2	92·4	82·2
13 ..	86·3	84·8	85·1	86·4	91·8	93·0	87·4	82·9	85·2	90·2	91·2	82·8
14 ..	85·9	83·7	86·9	87·1	93·2	91·1	85·4	83·9	80·8	89·3	90·2	83·9
15 ..	83·7	83·0	87·3	86·5	**93·4**	91·4	87·9	83·0	81·1	90·8	89·9	83·3
16 ..	84·6	80·2	86·1	88·9	92·0	85·1	86·8	85·9	79·5	90·6	89·0	84·3
17 ..	84·2	81·4	85·0	90·2	91·8	86·9	82·1	84·0	84·2	89·8	88·5	85·0
18 ..	84·5	78·0	84·3	87·3	92·0	88·1	86·0	84·7	83·2	88·3	90·2	83·1
19 ..	85·3	81·3	82·1	87·5	92·3	85·0	85·4	83·7	84·2	92·4	90·9	84·6
20 ..	83·3	**86·2**	82·4	88·0	91·5	85·5	82·1	83·2	85·3	89·7	90·0	86·3
21 ..	83·2	83·2	83·5	88·5	92·1	83·0	83·6	85·5	84·1	93·0	89·4	86·0
22 ..	83·6	82·4	83·2	88·9	92·2	83·4	84·2	84·2	85·4	**94·2**	90·0	83·9
23 ..	85·5	83·2	83·6	89·9	92·0	87·1	80·4	83·4	86·0	93·0	89·1	84·4
24 ..	85·3	83·3	84·6	90·0	91·9	89·0	80·9	84·6	85·9	92·2	88·7	83·5
25 ..	85·4	83·6	85·6	89·4	91·2	89·5	79·1	85·3	87·7	91·2	88·2	83·3
26 ..	84·2	83·9	85·4	90·8	92·2	83·0	83·0	85·9	**88·5**	91·3	88·6	82·9
27 ..	83·9	82·3	86·5	89·4	93·0	84·0	84·2	85·3	88·3	91·8	88·9	84·0
28 ..	83·5	82·1	86·5	90·7	93·0	87·6	82·5	86·4	87·0	92·4	89·2	84·2
29 ..	83·9		86·7	90·2	93·0	89·2	82·3	86·1	87·9	91·0	89·1	83·3
30 ..	82·9		86·1	**91·3**	93·0	89·1	79·1	**86·9**	88·4	92·4	87·2	83·7
31 ..	81·6		**87·4**		92·5		79·8	86·1		91·2		89·1
Monthly Mean.	84·3	**83·0**	84·6	88·0	**92·0**	89·5	84·8	84·5	85·6	90·9	90·0	85·1

Annual Mean .. 86·9°

The greatest maximum temperature recorded during the year (that of 22nd October) was .. 94·2°

TABLE IId.—*Showing the minimum temperature of the Air on each day during the year 1914.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1 ..	68·6	69·3	71·1	74·1	81·2	83·4	81·8	76·4	78·8	79·7	77·8	73·3
2 ..	69·3	68·3	71·3	74·8	**80·2**	82·9	82·4	77·8	77·7	79·4	77·4	73·7
3 ..	69·3	69·6	70·9	74·5	80·8	83·0	78·4	78·6	78·9	79·2	75·4	75·4
4 ..	70·7	67·5	69·1	74·9	81·4	83·2	81·4	78·4	78·0	79·0	79·9	72·1
5 ..	71·5	67·6	70·5	74·6	81·4	83·2	80·4	78·2	79·0	77·8	79·0	70·5
6 ..	71·1	68·5	72·5	74·9	81·6	83·9	81·3	77·6	78·2	79·5	76·8	72·5
7 ..	71·4	68·5	71·1	75·4	82·2	83·2	79·2	77·4	78·4	78·4	79·0	70·0
8 ..	71·1	70·2	71·3	76·2	81·9	83·4	78·6	77·5	79·8	79·9	79·4	70·5
9 ..	71·5	68·9	71·5	74·9	82·0	81·8	79·2	77·0	78·8	79·8	77·8	72·5
10 ..	70·7	68·5	73·1	**73·3**	82·6	83·4	80·2	77·9	78·0	79·4	78·6	70·5
11 ..	69·5	69·5	73·3	74·1	82·0	82·8	81·8	77·5	78·9	78·2	79·6	70·0
12 ..	69·5	67·3	72·3	75·7	81·8	82·6	80·6	77·2	77·2	78·2	79·2	67·5
13 ..	69·3	70·5	68·5	75·8	81·6	80·4	79·6	76·9	76·8	78·4	79·6	70·5
14 ..	71·5	71·5	**67·5**	75·9	81·4	77·8	80·2	**75·8**	77·2	79·9	79·2	69·5
15 ..	70·5	74·1	69·9	74·9	82·4	81·2	79·4	78·2	77·0	79·0	75·8	71·9
16 ..	69·5	70·3	72·3	75·4	83·2	78·4	80·2	77·1	**76·4**	77·4	75·4	72·0
17 ..	71·1	71·3	71·3	76·2	81·8	78·6	77·2	77·9	76·4	79·5	76·6	70·3
18 ..	72·3	68·5	71·5	75·6	81·6	77·5	81·2	78·6	79·0	**75·9**	75·4	70·5
19 ..	71·3	**62·1**	73·3	75·4	81·7	79·4	79·6	78·0	77·6	79·6	77·4	68·0
20 ..	72·1	68·5	68·5	76·4	81·6	77·4	78·1	77·0	78·2	79·7	76·2	70·3
21 ..	70·1	71·1	68·1	77·2	81·4	77·6	77·6	77·3	77·1	78·6	74·8	72·0
22 ..	68·3	69·8	72·4	77·9	81·4	**76·4**	78·0	77·4	77·5	79·6	75·4	70·5
23 ..	67·5	70·9	72·1	79·0	81·4	78·2	75·4	76·2	77·6	81·2	73·0	69·5
24 ..	68·3	69·1	73·1	77·4	82·0	80·9	**74·9**	77·9	77·0	78·6	73·0	68·3
25 ..	69·1	68·5	73·1	77·6	81·9	82·2	75·3	77·4	78·2	76·4	**71·7**	66·6
26 ..	67·8	71·3	73·7	78·2	82·4	79·3	75·2	78·4	79·5	76·4	72·5	**65·6**
27 ..	68·5	71·1	72·5	78·8	82·8	78·4	78·4	78·6	78·4	77·2	73·5	67·1
28 ..	**65·3**	73·5	75·6	80·2	82·6	78·6	76·4	77·4	76·8	76·4	74·6	68·3
29 ..	67·6		76·3	78·4	83·2	81·4	76·6	76·4	80·2	78·4	72·0	68·6
30 ..	67·5		78·2	80·4	82·8	81·4	76·2	79·7	79·6	77·5	73·1	68·3
31 ..	69·2		75·6		82·5		76·0	78·9		77·4		69·5
Monthly Mean.	69·7	**69·5**	72·0	76·3	**81·9**	80·7	78·7	77·6	78·1	78·6	76·3	70·2

Annual Mean .. 75·8°

The least minimum temperature recorded during the year (that of 19th February) was .. 62·1

Pressure of Vapour, 1914.

TABLE IIIa.—*Daily and Monthly Means.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	0·661	0·626	0·646	0·794	0·952	0·939	0·974	**0·929**	0·891	0·934	0·758	0·710
2 ..	·588	·593	·661	·788	·921	·949	·974	·929	·888	·919	·750	**·728**
3 ..	·595	·606	·580	·758	·938	·910	·967	·924	·868	·910	·738	·655
4 ..	·645	·603	·596	·773	·919	·957	·960	·925	·865	·927	·837	·625
5 ..	·699	·573	·673	·770	·885	·949	**·981**	·925	·883	·926	·845	·629
6 ..	**·706**	·603	·734	·771	·891	·970	·969	·919	·898	·954	·878	·658
7 ..	·634	·635	·700	·704	·908	·976	·949	·909	·895	·916	·894	·641
8 ..	·635	·622	·735	·746	·892	·958	·947	·909	·910	·911	·908	·692
9 ..	·590	·572	·726	·725	·894	·973	·951	·910	·881	**·955**	**·921**	·699
10 ..	·598	·602	·697	**·692**	·916	·962	·964	·917	·901	·830	·907	·595
11 ..	·563	·593	·679	·702	·895	·961	·958	·909	·919	·857	·846	**·487**
12 ..	·608	·591	·622	·731	**·876**	·963	·953	·921	·912	·854	·847	·510
13 ..	·613	·695	**·459**	·755	·891	·950	·964	·896	·941	·880	·825	·615
14 ..	·618	**·735**	·483	·738	·962	·972	·961	·900	·909	·920	·799	·660
15 ..	·671	·713	·582	·756	**1·013**	·974	·959	·915	·930	·879	·732	·696
16 ..	·679	·640	·710	·767	·002	·940	·941	·905	·918	·871	·737	·728
17 ..	·667	·663	·695	·806	0·959	·928	·924	·898	·913	·865	·764	·704
18 ..	·661	·490	·691	·808	·904	·935	·940	·908	·928	·880	·734	·690
19 ..	·658	**·392**	·619	·797	·906	**·905**	·938	·909	·926	·824	·702	·622
20 ..	·686	·540	·583	·816	·898	·936	·937	·875	·909	·849	·698	·684
21 ..	·556	·690	·633	·868	·916	·918	·958	·882	**·858**	·860	·688	·556
22 ..	**·554**	·658	·680	·919	·984	·934	·962	·885	·865	·871	·682	·585
23 ..	·598	·590	·713	·914	·964	·965	·888	·890	·884	·783	·623	·521
24 ..	·606	·583	·738	·883	·915	**·989**	·890	·874	·901	**·693**	·601	·523
25 ..	·634	·622	·765	·874	·916	·987	**·881**	**·873**	·934	·719	·618	·504
26 ..	·651	·649	·733	·911	·925	·964	·913	·880	·940	·769	·590	·552
27 ..	·648	·680	·748	·919	·929	·959	·916	·893	·924	·725	**·578**	·567
28 ..	·626	·649	·812	·929	·932	·974	·901	·889	·897	·724	·580	·577
29 ..	·587		·859	·916	·917	·981	·898	·899	·947	·758	·603	·584
30 ..	·637		**·866**	**·939**	·903	·986	·886	·902	**·950**	·734	·646	·540
31 ..	·662		·839		·903		·906	·891		·744		·599
Monthly Mean.	0·630	0·615	0·686	0·809	0·923	0·955	0·939	0·903	0·906	0·846	0·744	0·617
Annual Variation.	−·168	−·183	−·112	+·011	+·125	+·157	+·141	+·105	+·108	−·048	−·054	−·181

Annual Mean — Inch. 0·798

TABLE IIIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0.001 inch.

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 2	+ 13	+ 10	0	− 5	− 5	− 8	− 9	− 12	− 13	0	+ 8	− 6	− 2
1 2	+ 5	+ 3	− 8	− 12	− 10	− 12	− 8	− 17	− 15	− 3	+ 3	− 8	− 7
2 2	− 6	+ 7	− 9	− 16	− 18	− 14	− 16	− 21	− 15	− 20	− 13	− 25	− 14
3 2	− 19	+ 5	− 15	− 23	− 19	− 17	− 21	− 20	− 19	− 18	− 17	− 24	− 17
4 2	− 35	− 15	− 10	− 20	− 20	− 18	− 19	− 20	− 15	− 18	− 7	− 33	− 19
5 2	− 44	− 31	− 21	− 21	− 20	− 19	− 23	− 21	− 21	− 22	− 21	− 38	− 25
6 2	− 52	− 47	− 25	− 19	− 15	− 16	− 28	− 18	− 17	− 24	− 24	− 39	− 27
7 2	− 65	− 48	− 17	− 9	− 9	− 11	− 9	− 12	− 2	− 22	− 26	− 46	− 23
8 2	− 45	− 44	− 14	− 2	+ 2	− 4	+ 3	− 3	+ 10	− 14	− 20	− 42	− 14
9 2	− 32	− 48	− 20	− 2	+ 1	+ 7	+ 12	+ 7	+ 17	− 5	− 6	− 37	− 9
10 2	− 33	− 29	− 30	− 6	+ 5	+ 17	+ 18	+ 28	+ 22	+ 1	− 16	− 17	− 3
11 2	− 36	− 15	− 15	− 7	+ 12	+ 20	+ 14	+ 35	+ 31	− 13	− 19	− 16	− 1
12 2	− 64	− 12	+ 11	+ 5	+ 14	+ 19	+ 19	+ 34	+ 33	− 30	− 44	− 13	− 2
13 2	− 53	+ 13	+ 21	+ 7	+ 15	+ 25	+ 20	+ 23	+ 30	− 24	− 41	− 8	+ 2
14 2	+ 6	+ 25	+ 28	+ 19	+ 18	+ 29	+ 27	+ 31	+ 28	+ 21	− 15	+ 10	+ 19
15 2	+ 43	+ 23	+ 31	+ 16	+ 13	+ 18	+ 12	+ 30	+ 17	+ 25	+ 13	+ 14	+ 21
16 2	+ 65	+ 27	+ 21	+ 18	+ 12	+ 15	+ 18	+ 17	+ 9	+ 37	+ 17	+ 40	+ 25
17 2	+ 75	+ 23	+ 18	+ 14	+ 7	+ 6	+ 10	+ 2	− 5	+ 33	+ 32	+ 49	+ 22
18 2	+ 82	+ 23	+ 14	+ 12	+ 10	+ 1	+ 5	− 3	− 14	+ 39	+ 40	+ 61	+ 22
19 2	+ 79	+ 21	+ 7	+ 8	+ 4	− 5	− 5	− 11	− 14	+ 40	+ 50	+ 61	+ 20
20 2	+ 66	+ 33	+ 12	+ 12	+ 7	+ 2	− 2	− 10	− 11	+ 35	+ 56	+ 61	+ 22
21 2	+ 46	+ 27	+ 8	+ 15	+ 4	− 7	− 1	− 15	− 10	+ 2	+ 43	+ 45	+ 13
22 2	+ 7	+ 25	+ 6	+ 14	+ 4	− 12	− 6	− 13	− 9	+ 1	+ 14	+ 14	+ 4
23 2	− 1	+ 14	+ 1	+ 3	− 3	− 6	− 10	− 15	− 14	− 11	+ 2	+ 4	− 3
Range.	147	81	61	42	38	48	55	56	54	70	100	107	52

Additional Capacity of the Air, 1914.

TABLE IVa.—*Daily and Monthly Means.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	0·180	0·211	0·223	0·215	**0·234**	0·337	0·215	**0·080**	0·207	0·202	0·386	0·257
2	·265	·269	·210	·218	·248	·315	·232	·123	·204	·218	·401	·319
3	·273	·254	·324	·256	·251	·347	·186	·132	**·223**	·208	·408	·396
4	·257	·258	·317	·233	·297	·317	**·233**	·113	·204	·203	·338	·389
5	**·176**	·302	·256	·230	·317	**·350**	·187	·125	·214	·204	·235	·330
6	·200	·271	·193	·246	·330	·338	·186	·095	·135	**·176**	**·176**	·317
7	·303	·239	·210	**·332**	·325	·311	·169	·112	·189	·190	·243	·288
8	·283	·295	**·178**	·278	·340	·302	·167	·152	·153	·196	·229	·250
9	**·354**	·327	·182	·274	·343	·293	·157	·134	·199	·212	·212	·234
10	·320	·278	·218	·297	·336	·308	·164	·127	·197	·379	·264	·334
11	·340	·271	·237	·295	·333	·319	·187	·134	·185	·335	·343	**·415**
12	·295	·275	·294	·298	·333	·265	·201	·147	·083	·295	·342	·307
13	·300	·214	**·443**	·248	·296	·193	·176	·085	·067	·253	·349	·264
14	·304	·190	·422	·280	·263	·190	·141	·109	·059	·219	·350	·228
15	·211	·183	·359	·255	·235	·231	·175	·121	**·047**	·269	·373	·210
16	·223	·189	·220	·287	·250	·140	·175	·160	·054	·269	·326	**·190**
17	·249	**·160**	·226	·273	·277	·172	·126	·154	·122	·290	·294	·211
18	·267	·280	·229	·241	·318	·164	·183	·149	·113	·267	·337	·203
19	·274	**·365**	·253	·246	·301	·174	·177	·131	·105	·357	·394	·256
20	·222	·355	·256	·230	·302	·126	·115	·143	·146	·297	·393	·244
21	·339	·207	·236	·210	·294	·109	·102	·172	·174	·317	·369	·378
22	·311	·225	·220	**·204**	·245	**·094**	·125	·149	·185	·360	·378	·288
23	·284	·314	·208	·219	·254	·160	·059	·134	·152	·440	·400	·348
24	·288	·307	·202	·236	·303	·198	·082	·181	·139	**·465**	·434	·336
25	·272	·254	·189	·248	·290	·192	·056	·179	·156	·400	·362	·345
26	·240	·246	·236	·224	·315	·126	·100	·191	·163	·328	·415	·275
27	·243	·198	·225	·228	·332	·114	·134	·179	·125	·394	**·446**	·283
28	·245	·243	·203	·237	·320	·190	·111	·192	·170	·433	·436	·287
29	·284		·200	·231	·347	·211	·087	·187	·179	·400	·379	·283
30	·209		·184	·233	**·361**	·211	**·050**	·204	·186	·418	·325	·317
31	·182		·202		·357		·051	**·208**		·384		·341
Monthly Mean.	0·264	0·256	0·244	0·250	0·302	0·227	0·146	**0·145**	0·151	0·303	**0·345**	0·294
Annual Variation.	+·020	+·012	·000	+·006	+·058	−·017	−·098	−·099	−·093	+·059	+·101	+·050

Annual Mean .. Inch. 0·244

TABLE IVb.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0·001 inch.

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November	December.	Year.
H. m.													
0 2	− 90	− 74	− 68	− 73	− 85	− 56	− 7	− 25	− 27	− 86	− 96	− 70	− 63
1 2	− 92	− 85	− 71	− 79	− 86	− 50	− 16	− 27	− 36	− 95	−105	− 82	− 69
2 2	**− 93**	− 92	− 77	− 81	− 85	− 53	− 9	− 23	− 41	− 89	− 95	− 73	− 68
3 2	− 87	**− 98**	− 83	− 85	− 90	− 55	− 12	− 28	− 40	− 95	−108	− 82	− 72
4 2	− 78	− 90	− 96	− 95	− 93	− 58	− 20	− 26	− 42	−104	−121	− 82	− 75
5 2	− 83	− 82	− 99	−102	**− 98**	**− 60**	− 21	− 26	− 41	−107	−118	− 96	− 78
6 2	− 83	− 74	**−101**	**−108**	− 96	− 58	− 19	**− 29**	− 44	**−114**	**−123**	**− 102**	**− 79**
7 2	− 79	− 79	−101	− 78	− 63	− 56	**− 22**	− 29	**− 45**	− 99	−114	− 94	− 72
8 2	− 67	− 42	− 48	− 34	− 18	− 31	− 12	− 24	− 30	− 67	− 77	− 62	− 43
9 2	− 33	+ 18	+ 12	+ 7	+ 33	− 2	+ 1	− 10	− 20	− 24	− 37	− 15	− 6
10 2	+ 36	+ 64	+ 87	+ 66	+ 85	+ 40	+ 8	+ 2	+ 4	+ 37	+ 46	+ 35	+ 42
11 2	+104	+103	+120	+111	+110	+ 67	+ 16	+ 20	+ 26	+110	+119	+101	+ 84
12 2	+216	**+142**	+124	+140	+137	+106	+ 24	+ 33	+ 47	+194	+222	+158	+129
13 2	**+249**	+134	+130	+159	+147	**+109**	+ 16	+ 44	+ 57	**+222**	**+265**	**+201**	**+144**
14 2	+209	+133	**+141**	**+162**	**+156**	+102	**+ 26**	+ 46	**+ 75**	+189	+240	+189	+139
15 2	+162	+121	+126	+153	+150	+ 85	+ 18	**+ 47**	+ 75	+165	+197	+183	+123
16 2	+110	+107	+107	+121	+123	+ 63	+ 23	+ 44	+ 65	+115	+143	+122	+ 95
17 2	+ 32	+ 68	+ 66	+ 75	+ 71	+ 46	+ 13	+ 31	+ 53	+ 59	+ 57	+ 46	+ 51
18 2	− 31	+ 19	+ 10	+ 7	− 3	+ 11	+ 5	+ 13	+ 27	+ 1	0	− 10	+ 4
19 2	− 56	− 1	− 11	− 29	− 40	− 13	+ 2	+ 6	+ 6	− 30	− 27	− 31	− 19
20 2	− 59	− 25	− 27	− 43	− 58	− 29	− 4	− 2	− 7	− 43	− 52	− 49	− 33
21 2	− 62	− 38	− 38	− 59	− 64	− 39	− 5	− 7	− 15	− 35	− 69	− 58	− 41
22 2	− 50	− 56	− 49	− 65	− 71	− 36	− 8	− 7	− 19	− 55	− 73	− 56	− 45
23 2	− 66	− 63	− 59	− 68	− 76	− 45	− 9	− 17	− 22	− 62	− 82	− 67	− 53
Range.	342	240	242	270	254	169	48	76	120	336	388	303	223

Rainfall, 1914.

TABLE Va.—*Total fall of rain (in inches) as measured by F. Chambers's self-registering gauge, the funnel of which is 28 feet above the ground.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		In.		In.		In.	In.	In.	In.	In.	In.	
1	..	..	..	..	..	0·13	0·06	0·36	..	..	..	..
2	..	..	..	..	..	..	0·01	0·21	0·05	..	..	..
3	..	..	..	..	..	..	0·17	0·84	0·06	0·01	..	..
4	..	..	..	..	..	0·01	0·04	0·24	0·06	..	0·03	..
5	..	..	..	..	..	..	0·34	0·18	0·01	..	0·14	..
6	..	..	..	..	..	0·01	0·36	0·82	0·38	..	..	..
7	..	..	..	..	..	0·04	0·22	0·66	..	..	..	..
8	..	..	..	0·07	..	0·07	0·73	0·01	0·27	..	..	..
9	..	..	..	..	..	0·02	0·17	0·57	0·07	..	..	..
10	..	..	..	..	..	0·01	0·13	0·32	0·02	..	..	..
11	..	..	..	..	..	..	0·24	0·19	0·05	..	..	..
12	..	..	..	..	..	0·07	0·08	0·19	3·34	..	..	..
13	..	..	..	..	..	1·30	0·18	1·76	2·52	..	..	..
14	..	..	..	..	..	0·06	0·66	0·17	2·34	..	..	..
15	..	..	..	..	..	0·04	0·06	2·28	3·95	..	..	..
16	..	..	..	..	..	1·04	0·41	0·28	5·50	..	..	..
17	..	0·07	..	..	..	0·69	2·24	0·01	0·54	..	..	..
18	..	..	..	..	..	0·21	0·21	0·23	0·65	..	..	..
19	..	..	..	..	..	0·10	0·01	0·42	0·08	..	..	..
20	..	..	..	..	..	1·98	0·99	0·27	..	..	..	..
21						3·64	1·30	0·21	0·05	..		..
22	..	..	..	..	..	3·29	0·20	0·39	..	..	..	..
23	..	..	..	..	..	0·25	6·11	0·38	0·10	..	..	..
24	..	..	..	..	..	..	2·02	0·38	0·07	..	..	..
25	..	..	..	..	..	0·03	3·45	0·04	..	..	..	..
26	..	..	..	..	..	1·87	1·45	0·07	0·02	..	..	..
27	..	..	..	..	..	0·97	0·49	0·11	0·38	..	..	..
28	..	..	..	..	..	0·08	0·66	0·04	0·01	..	..	..
29	..		..	..	..	..	2·42	0·26	..	..	..	..
30	..		..	..	..	0·03	2·39	..	..	..	..	..
31	..		..		..		2·24	0·03		..		..
Monthly Total.	..	0·07	..	0·07	..	15·94	30·04	12·12	20·52	0·01	0·17	..
Number of rainy days.	..	1	..	1	..	24	31	30	23	1	2	..

	Inches.
Total fall of rain in the year	78·94
Total number of rainy days in the year	113
The greatest daily fall of rain in the year (that of 23rd July) was	6·11

No rain fell in the months of January, March, May and December, nor on any of the days left blank in the above table.

TABLE Vb.—*Total fall of rain (in inches) as measured by Newman's gauge, placed 4½ feet above the ground.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		In.		In.		In.	In.	In.	In.	In.	In.	
1	..	..	..	..	..	0·13	0·05	0·38	..	..	..	..
2	..	..	..	..	..	..	0·01	0·23	0·03	..	..	..
3	..	..	..	..	..	..	0·20	0·85	0·07	0·01	..	..
4	..	..	..	..	..	0·01	0·05	0·24	0·06	..	0·03	..
5	..	..	..	..	..	..	0·35	0·17	0·01	..	0·15	..
6	..	..	..	..	..	0·01	0·38	0·84	0·40	..	..	..
7	..	..	..	..	..	0·05	0·25	0·67	..	..	..	..
8	..	..	..	0·07	..	0·09	0·76	0·01	0·28	..	..	..
9	..	..	..	..	..	0·02	0·17	0·60	0·07	..	..	..
10	..	..	..	..	..	0·01	0·13	0·31	0·02	..	..	..
11	..	..	..	..	..	..	0·27	0·20	0·07	..	..	..
12	..	..	..	..	..	0·09	0·07	0·22	3·40	..	..	..
13	..	..	..	..	..	1·38	0·22	1·99	2·55	..	..	..
14	..	..	..	..	..	0·07	0·66	0·18	2·36	..	..	..
15	..	..	..	..	..	0·06	0·06	2·32	4·04	..	..	..
16	..	..	..	..	..	1·08	0·42	0·27	5·65	..	..	..
17	..	0·08	..	..	..	0·69	2·33	0·01	0·57	..	..	..
18	..	..	..	..	..	0·23	0·21	0·26	0·68	..	..	..
19	..	..	..	..	..	0·11	0·02	0·42	0·08	..	..	..
20	..	..	..	..	..	2·07	1·04	0·28	..	..	..	..
21	..	..	..	..	..	3·86	1·36	0·24	0·05	..	..	..
22	..	..	..	..	..	3·35	0·21	0·39	..	..	..	..
23	..	..	..	..	..	0·25	6·28	0·40	0·11	..	..	..
24	..	..	..	..	..	..	2·08	0·40	0·08	..	..	..
25	..	..	..	..	..	0·03	3·54	0·05	..	..	..	..
26	..	..	..	..	..	1·93	1·55	0·07	0·02	..	..	..
27	..	..	..	..	..	1·03	0·48	0·10	0·42	..	..	..
28	..	..	..	..	..	0·09	0·72	0·04	0·01	..	..	..
29	..		..	..	..	0·01	2·48	0·27	..	..	..	..
30	..		..	..	..	0·04	2·46	..	..	..	..	..
31	..		..		..		2·31	0·03		..		..
Monthly Total.	..	0·08	..	0·07	..	16·69	31·12	12·44	21·03	0·01	0·18	..
Number of rainy days.	..	1	..	1	..	25	31	30	23	1	2	..

	Inches
Total fall of rain in the year	81·62
Total number of rainy days in the year	114
The greatest daily fall of rain in the year (that of 23rd July) was	6·28

No rain fell in the months of January, March, May and December, nor on any of the days left blank in the above table.

Velocity of Wind, 1914.

Robinson Beckley's Anemograph.

Table VIa.—*Mean Velocity of the Wind in miles per hour, without regard to the direction from which it blew for each day of Bombay Civil Time, also the Mean Monthly Velocity and its variation from the mean of the year.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles
1 ..	5·4	6·6	5·6	4·7	7·1	6·2	8·6	10·3	3·7	3·8	6·6	5·4
2 ..	5·1	8·1	8·6	5·7	5·3	7·5	7·8	9·8	4·0	5·2	7·7	6·6
3 ..	6·3	6·7	10·0	5·9	5·8	7·9	8·8	9·3	4·9	6·3	7·0	7·5
4 ..	3·8	6·5	7·6	7·0	6·7	6·8	9·7	12·8	5·4	5·0	8·4	6·2
5 ..	3·0	7·0	4·8	5·6	6·1	6·8	12·0	10·9	5·4	6·2	4·8	5·5
6 ..	4·0	6·1	5·4	4·8	5·6	6·3	13·2	10·1	3·2	6·2	4·9	6·9
7 ..	4·8	7·2	6·5	4·8	5·2	7·8	15·2	7·0	4·4	6·8	4·4	5·9
8 ..	5·7	8·2	6·2	5·0	6·3	8·1	16·0	5·6	6·2	6·2	4·7	5·1
9 ..	8·2	7·8	7·7	6·7	5·8	8·6	15·0	6·5	6·5	4·3	4·0	5·2
10 ..	5·3	5·4	4·9	5·3	6·4	6·7	16·1	5·8	4·9	5·7	4·7	6·2
11 ..	6·5	7·3	6·7	5·4	7·8	5·0	13·8	7·3	8·6	5·0	5·4	7·0
12 ..	5·3	4·5	7·2	5·9	7·1	4·5	10·4	7·3	9·7	4·3	5·3	4·5
13 ..	5·1	4·1	11·2	6·9	10·8	5·1	10·5	7·3	6·2	5·0	5·1	4·9
14 ..	4·5	3·1	8·1	6·5	10·3	5·3	10·3	6·5	6·5	3·5	5·0	5·1
15 ..	4·8	6·4	5·5	6·2	7·8	8·7	13·6	9·7	8·1	4·0	6·0	4·0
16 ..	4·3	3·1	5·4	7·3	5·6	9·6	14·1	9·0	13·6	4·6	6·8	5·2
17 ..	4·5	5·6	5·7	6·5	5·6	9·4	16·2	6·7	10·8	4·3	5·9	4·5
18 ..	4·3	9·1	5·4	4·3	5·8	10·3	16·7	5·8	8·1	4·4	5·7	5·4
19 ..	4·4	8·0	7·7	5·4	7·2	9·6	16·6	7·0	4·3	5·5	6·2	8·0
20 ..	5·0	5·4	7·8	6·3	7·5	11·5	14·3	10·6	5·1	4·3	5·9	6·3
21 ..	6·9	5·7	5·4	6·4	8·9	11·0	12·0	11·9	4·5	5·8	4·8	6·9
22 ..	5·1	8·9	5·1	4·9	7·8	7·5	10·0	10·0	5·9	5·9	6·4	4·4
23 ..	5·8	11·7	6·2	7·4	6·0	6·9	11·7	9·5	3·8	7·7	6·3	6·5
24 ..	4·5	7·5	7·5	4·5	5·6	6·7	13·7	12·5	5·0	7·0	6·4	7·2
25 ..	4·9	5·1	6·6	5·6	4·5	7·8	16·9	10·7	6·4	6·1	6·6	7·6
26 ..	4·3	4·2	6·7	5·0	4·8	13·3	12·7	9·2	5·5	5·7	7·7	5·1
27 ..	5·8	4·1	6·0	3·8	5·8	15·7	12·1	6·8	4·5	5·8	8·3	4·0
28 ..	6·3	4·8	5·7	5·3	6·5	10·1	11·7	9·1	4·0	5·9	8·4	4·7
29 ..	5·4		6·2	4·9	6·2	7·3	10·7	9·7	4·0	5·4	7·5	6·5
30 ..	6·2		5·4	6·2	5·4	6·8	9·5	7·5	3·4	5·7	6·5	7·9
31 ..	6·5		4·8		4·7		8·7	4·8		5·3		6·2
Monthly Mean.	5·2	6·4	6·6	5·7	6·5	8·2	12·5	8·6	5·9	5·4	6·1	5·9
Annual Variation.	− 1·7	− 0·5	− 0·3	− 1·2	− 0·4	+ 1·3	+ 5·6	+ 1·7	− 1·0	− 1·5	− 0·8	− 1·0

Table VIb.—*Showing the mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year 1914, and for the whole year.*

1914. Bombay Civil Time Hourly Intervals	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1	− 1·7	− 2·6	− 1·8	− 2·0	− 1·9	− 0·8	+ 0·1	+ 0·2	− 0·7	− 1·7	− 2·1	− 1·8	− 1·4
1 „ 2	− 1·6	− 2·3	− 1·5	− 2·1	− 1·8	0·0	+ 0·4	+ 0·2	− 0·7	− 1·8	− 1·8	− 1·6	− 1·2
2 „ 3	− 1·2	− 1·4	− 2·1	− 2·1	− 2·1	− 0·1	+ 0·6	+ 0·3	− 0·9	− 1·5	− 1·6	− 1·2	− 1·1
3 „ 4	− 0·1	− 1·5	− 2·0	− 2·3	− 1·6	− 0·4	+ 0·7	+ 0·1	− 0·6	− 0·8	− 0·6	− 1·0	− 0·8
4 „ 5	− 0·4	− 0·6	− 2·1	− 2·2	− 1·6	0·0	+ 0·6	+ 0·1	− 0·1	− 0·4	0·0	− 1·1	− 0·6
5 „ 6	+ 0·2	− 0·8	− 2·2	− 2·1	− 1·7	0·0	+ 0·4	0·0	− 0·5	+ 0·2	− 0·1	− 0·9	− 0·6
6 „ 7	− 0·4	− 1·0	− 2·2	− 2·6	− 1·5	− 0·3	− 0·2	− 0·2	+ 0·1	+ 0·7	+ 0·7	− 0·4	− 0·6
7 „ 8	− 0·1	− 1·3	− 1·8	− 2·1	− 1·3	+ 0·1	− 0·6	− 0·5	+ 0·2	+ 0·6	+ 1·0	− 0·4	− 0·5
8 „ 9	+ 0·3	− 0·9	− 1·7	− 1·7	− 0·7	+ 0·1	− 0·7	− 0·4	+ 0·1	+ 0·4	+ 1·0	0·0	− 0·3
9 „ 10	+ 0·1	− 0·6	− 1·5	− 1·8	− 0·1	− 0·1	− 0·4	− 0·1	+ 0·1	− 0·3	+ 0·7	+ 0·1	− 0·3
10 „ 11	− 0·4	− 0·9	− 1·0	− 0·7	+ 0·7	− 0·1	− 0·4	− 0·3	+ 0·1	− 0·8	− 0·1	− 0·4	− 0·4
11 „ 12	− 1·8	− 0·6	+ 0·1	+ 0·9	+ 1·2	+ 0·1	− 0·1	+ 0·2	− 0·1	− 1·8	− 1·5	− 1·2	− 0·4
12 „ 13	− 1·3	+ 0·9	+ 1·7	+ 2·7	+ 2·0	0·0	− 0·4	+ 0·7	+ 0·1	− 1·2	− 1·8	− 0·6	+ 0·2
13 „ 14	− 0·2	+ 2·4	+ 2·9	+ 3·8	+ 2·7	+ 0·4	+ 0·1	0·0	+ 1·0	+ 0·1	− 0·9	+ 0·2	+ 1·0
14 „ 15	+ 1·3	+ 3·2	+ 3·3	+ 4·5	+ 3·4	+ 1·0	+ 0·4	+ 0·3	+ 1·7	+ 1·5	+ 0·7	+ 1·2	+ 1·9
15 „ 16	+ 1·9	+ 3·4	+ 4·1	+ 5·0	+ 3·3	+ 0·9	+ 0·2	+ 0·9	+ 1·1	+ 2·4	+ 1·6	+ 1·8	+ 2·2
16 „ 17	+ 2·4	+ 3·3	+ 4·3	+ 4·8	+ 3·2	+ 1·0	+ 0·5	+ 0·6	+ 1·6	+ 2·7	+ 2·3	+ 2·1	+ 2·4
17 „ 18	+ 2·2	+ 2·6	+ 3·7	+ 3·5	+ 2·1	+ 0·6	+ 0·4	− 0·2	+ 0·7	+ 2·4	+ 3·2	+ 2·7	+ 2·0
18 „ 19	+ 2·6	+ 1·8	+ 2·4	+ 2·6	+ 0·8	+ 0·1	− 0·4	− 0·1	+ 0·7	+ 2·3	+ 2·8	+ 2·6	+ 1·5
19 „ 20	+ 1·7	+ 1·0	+ 1·3	+ 0·7	0·0	− 0·3	− 0·7	− 0·3	− 0·1	+ 1·3	+ 2·3	+ 2·5	+ 0·8
20 „ 21	+ 1·0	+ 0·3	+ 0·1	− 0·7	− 0·6	0·0	− 0·3	− 0·5	− 0·5	− 0·1	+ 0·4	+ 1·2	0·0
21 „ 22	− 0·7	− 1·0	− 1·0	− 1·7	− 1·1	+ 0·1	+ 0·1	− 0·4	− 1·0	− 0·8	− 1·2	− 0·2	− 0·7
22 „ 23	− 1·5	− 1·6	− 1·8	− 2·1	− 1·5	− 1·0	− 0·2	− 0·8	− 0·7	− 1·5	− 2·3	− 1·3	− 1·4
23 „ 24	− 2·0	− 2·1	− 1·9	− 1·8	− 1·8	− 0·5	− 0·4	− 0·7	− 1·0	− 1·3	− 2·1	− 1·8	− 1·4
Range.	4·6	6·0	6·5	7·6	5·5	2·0	1·4	1·7	2·7	4·5	5·5	4·5	3·8

	Miles.
The mean velocity for June to August ..	9·8
The mean velocity for September to May ..	6·0
The mean velocity for the year ..	6·9

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Mean Daily Velocities of the North and East Components of the Wind, 1914.

Table VIc.—*Showing the Mean Velocities of the North or South and East or West Components of the Winds which blew on each day of the year 1914.*

In miles per hour.

1914.	Month.																							
	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
Date.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.
1 ..	4·3 N	0·5 W	4·5 N	1·0 W	2·5 N	2·1 W	0·1 S	3·4 W	1·3 S	4·5 W	0·8 S	5·9 W	3·5 S	7·8 W	4·0 S	9·3 W	2·2 S	2·3 W	0·2 N	1·3 W	3·5 N	0·4 E	2·1 N	1·8 E
2 ..	1·8 N	1·4 E	6·6 N	2·5 W	5·8 N	4·1 W	2·1 N	4·2 W	0·1 N	4·3 W	0·3 N	7·5 W	4·3 S	5·9 W	4·6 S	8·5 W	2·1 S	2·1 W	2·6 N	0·6 W	5·4 N	0·9 E	3·4 N	2·8 E
3 ..	3·5 N	1·2 E	5·6 N	2·4 W	7·8 N	3·4 W	1·9 N	3·2 W	2·0 S	3·2 W	1·4 S	7·7 W	3·7 S	7·4 W	5·5 S	7·3 W	1·3 S	4·4 W	2·4 N	0·7 E	4·2 N	0·6 E	2·6 N	4·2 E
4 ..	1·0 N	0·8 E	5·1 N	0·9 W	5·6 N	2·4 W	3·4 N	4·3 W	5·6 S	1·8 W	2·5 S	6·1 W	3·4 S	8·9 W	3·7 S	12·0 W	0·6 S	5·2 W	2·4 N	0·1 E	0·7 S	4·8 E	1·4 N	3·2 E
5 ..	1·0 N	0·5 W	5·1 N	2·1 W	2·6 N	2·7 W	2·1 N	3·7 W	4·8 S	2·6 W	3·3 S	5·9 W	4·6 S	11·1 W	2·1 S	10·6 W	0·5 S	5·3 W	4·0 N	3·1 W	0·7 N	1·8 E	3·5 N	1·2 E
6 ..	2·0 N	0·2 E	3·8 N	1·4 W	1·4 N	2·9 W	1·2 N	2·9 W	4·8 S	2·5 W	3·7 S	4·9 W	0·9 S	13·0 W	1·4 S	9·8 W	1·8 S	1·8 W	3·5 N	3·2 W	2·5 N	1·4 E	4·5 N	1·0 E
7 ..	1·0 N	2·1 E	5·9 N	2·8 W	4·1 N	3·8 W	1·1 S	4·6 W	3·3 S	3·6 W	3·8 S	6·7 W	0·0	15·2 W	1·8 S	6·7 W	2·7 S	2·4 W	5·0 N	3·7 W	0·4 N	1·0 E	4·8 N	0·8 W
8 ..	3·1 N	1·2 E	6·8 N	3·2 W	4·2 N	4·0 W	1·3 N	4·0 W	3·3 S	5·0 W	3·4 S	7·1 W	0·0	16·0 W	2·6 S	4·9 W	3·2 S	2·7 W	4·0 N	2·4 W	2·2 N	0·4 W	3·3 N	0·1 W
9 ..	5·0 N	2·5 E	6·2 N	2·6 W	5·0 N	4·7 W	3·5 N	4·3 W	3·0 S	4·8 W	2·5 S	8·1 W	0·4 S	15·0 W	2·9 S	5·6 W	3·4 S	5·5 W	2·1 N	0·7 W	2·8 N	1·0 W	3·2 N	0·1 W
10 ..	3·2 N	0·3 E	4·0 N	1·0 W	2·2 N	2·1 W	2·7 N	3·7 W	2·4 S	5·6 W	1·3 S	6·3 W	0·4 S	16·1 W	4·1 S	3·7 W	2·9 S	3·8 W	3·8 N	1·0 E	2·4 N	0·4 E	4·1 N	0·5 W
11 ..	4·3 N	0·8 E	5·4 N	2·1 W	3·2 N	4·3 W	1·0 N	5·2 W	0·3 N	7·7 W	3·2 S	1·8 W	1·0 S	13·6 W	2·9 S	6·6 W	1·0 N	8·4 W	3·6 N	0·1 E	2·7 N	1·5 E	5·8 N	1·7 W
12 ..	2·7 N	0·4 E	2·5 N	0·7 W	2·7 N	2·0 W	2·1 N	5·5 W	2·7 N	6·5 W	1·0 N	1·5 W	3·2 S	9·8 W	1·0 S	7·1 W	1·3 N	9·3 W	2·2 N	0·7 W	2·6 N	0·2 W	2·6 N	0·4 W
13 ..	1·2 N	1·2 E	1·2 S	0·2 W	9·1 N	3·4 W	2·9 N	5·6 W	7·5 N	7·5 W	1·1 N	0·4 E	3·8 S	9·7 W	1·3 N	5·4 W	1·2 S	3·6 W	3·3 N	0·3 W	2·1 N	0·1 E	2·6 N	0·9 W
14 ..	2·5 N	0·9 E	0·6 N	3·0 W	6·5 N	1·3 W	3·2 N	4·8 W	7·1 N	6·3 W	0·9 N	1·2 E	3·9 S	9·2 W	0·4 N	1·8 W	0·3 N	3·8 W	0·5 N	0·9 W	2·0 N	0·7 E	3·3 N	1·5 W
15 ..	3·1 N	0·6 E	1·8 N	2·5 W	3·8 N	1·4 W	2·8 N	5·4 W	5·4 N	5·1 W	6·7 S	2·1 E	1·0 S	13·4 W	3·4 N	8·6 W	0·6 S	7·1 W	0·9 N	0·2 E	4·2 N	0·6 W	1·9 N	1·0 W
16 ..	2·5 N	0·3 E	1·3 N	0·5 W	3·6 N	3·4 W	4·3 N	4·5 W	2·9 S	3·4 W	8·2 S	1·0 W	4·3 S	13·3 W	0·4 N	8·9 W	4·0 S	12·5 W	1·9 N	1·1 E	5·4 N	1·9 W	2·8 N	1·5 W
17 ..	1·5 N	0·9 E	0·1 S	0·4 E	2·4 N	3·0 W	2·9 N	5·2 W	1·8 S	4·5 W	8·1 S	0·5 E	5·3 S	15·1 W	1·1 N	6·2 W	8·5 S	6·3 W	0·4 N	1·2 E	4·3 N	0·9 W	2·7 N	1·4 W
18 ..	0·7 N	0·7 E	7·5 N	3·3 W	1·6 N	3·1 W	0·2 N	4·3 W	1·0 N	5·5 W	8·5 S	1·7 E	4·4 S	15·8 W	0·2 S	5·4 W	6·0 S	4·8 W	1·2 N	1·0 E	3·8 N	0·2 E	4·5 N	1·6 W
19 ..	1·7 N	1·2 E	6·0 N	1·2 W	5·6 N	4·9 W	0·3 N	3·6 W	2·7 N	6·6 W	8·2 S	0·7 E	3·3 S	15·9 W	0·9 S	6·6 W	3·2 S	1·5 W	2·7 N	0·8 E	3·7 N	0·8 E	6·9 N	1·4 W
20 ..	2·3 N	0·1 W	1·0 N	0·9 E	4·5 N	2·7 W	3·3 N	4·8 W	3·9 N	6·2 W	9·0 S	1·1 W	2·6 S	13·8 W	0·2 S	10·4 W	2·3 S	1·9 W	1·0 N	0·1 W	2·9 N	0·8 E	4·6 N	0·7 W
21 ..	5·9 N	2·1 W	0·5 N	2·3 W	2·9 N	3·4 W	3·2 N	4·2 W	4·8 N	7·0 W	9·4 S	2·1 W	4·2 S	11·0 W	0·7 S	11·8 W	0·2 N	4·3 W	3·4 N	0·6 E	2·3 N	0·2 W	4·8 N	0·6 E
22 ..	3·2 N	0·4 E	6·0 N	4·3 W	1·2 N	2·6 W	0·7 N	3·2 W	3·4 N	6·5 W	5·8 S	3·8 W	3·3 S	9·4 W	1·2 S	9·8 W	0·2 N	5·9 W	2·5 N	1·5 E	3·7 N	0·2 E	1·1 N	1·4 E
23 ..	3·4 N	0·3 E	9·6 N	5·5 W	2·3 N	3·5 W	2·5 S	3·7 W	1·2 N	5·4 W	5·1 S	4·0 W	0·0	10·8 W	1·1 S	9·3 W	1·6 N	2·1 W	2·1 N	2·0 E	4·1 N	0·4 E	3·0 N	2·7 E
24 ..	2·1 N	0·1 E	6·0 N	4·0 W	3·8 N	4·0 W	1·1 N	4·0 W	0·9 N	5·1 W	0·8 S	6·5 W	1·8 S	13·3 W	0·3 N	12·4 W	2·8 N	3·5 W	3·1 N	1·5 E	2·7 N	3·2 E	4·6 N	0·1 W
25 ..	2·5 N	0·8 E	2·9 N	2·0 W	4·0 N	3·6 W	0·1 S	4·8 W	0·7 S	4·3 W	0·7 N	7·6 W	2·9 S	16·3 W	0·5 S	10·6 W	4·8 N	2·8 W	2·9 N	0·4 E	3·7 N	1·0 E	5·6 N	0·2 W
26 ..	1·6 N	0·3 E	0·3 N	1·3 W	3·7 N	4·0 W	1·0 N	4·6 W	1·0 S	4·4 W	1·2 N	13·0 W	0·3 S	12·6 W	1·8 S	8·8 W	2·5 N	0·8 W	2·6 N	0·9 E	4·5 N	3·0 E	3·7 N	0·2 W
27 ..	3·2 N	0·7 W	0·7 S	2·1 W	3·3 N	4·0 W	0·7 S	3·6 W	1·2 S	5·6 W	0·5 N	15·5 W	1·7 S	11·7 W	1·7 S	6·5 W	0·1 S	1·2 E	2·8 N	0·8 E	5·1 N	4·5 E	1·6 N	0·8 E
28 ..	5·1 N	2·4 W	1·3 N	4·5 W	3·0 N	3·7 W	0·5 S	3·1 W	0·7 S	6·3 W	5·2 S	8·5 W	2·7 S	11·1 W	1·4 S	8·8 W	1·5 N	1·4 E	2·7 N	2·0 E	4·4 N	3·9 E	2·4 N	2·1 E
29 ..	4·0 N	1·7 W			3·2 S	1·8 W	0·8 N	4·3 W	0·4 S	6·1 W	4·3 S	5·8 W	1·5 S	10·4 W	3·4 S	8·9 W	1·8 S	0·7 W	1·8 N	0·9 E	4·2 N	3·2 E	4·5 N	0·2 E
30 ..	3·7 N	2·7 W			3·5 S	1·2 W	0·4 N	4·2 W	0·1 N	5·2 W	4·5 S	5·1 W	0·4 S	9·1 W	2·6 S	7·0 W	0·4 N	3·4 W	2·6 N	0·3 E	2·8 N	2·3 E	6·9 N	1·2 W
31 ..	4·8 N	2·2 W			1·5 N	4·2 W			0·1 S	4·7 W			1·7 S	8·3 W	1·5 S	4·5 W			1·7 N	0·4 E			4·5 N	1·4 E
Monthly Mean.	2·8 N	0·2 E	3·7 N	2·1 W	3·3 N	3·2 W	1·4 N	4·2 W	0·1 N	5·1 W	3·5 S	4·6 W	2·4 S	11·9 W	1·5 S	7·9 W	1·1 S	3·9 W	2·4 N	0·0	3·2 N	1·1 E	3·7 N	0·3 E
Annual Variation.	1·8 N	3·6 E	2·7 N	1·3 E	2·3 N	0·2 E	0·4 N	0·8 W	0·9 S	1·7 W	4·5 S	1·2 W	3·4 S	8·5 W	2·5 S	4·5 W	2·1 S	0·5 W	1·4 N	3·4 E	2·2 N	4·5 E	2·7 N	3·7 E

The Velocities of the Mean Components for the year are 1·0 N and 3·4 W.

TABLE VI*d*.—*Showing the mean diurnal inequality of the Velocity of the North or South and East or West Components of the Wind for each month of the year 1914 and for the whole year.*

In miles per hour.

1914.	Month.																								Year.	
	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.			
Bombay Civil Time Hourly Intervals.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.
0 to 1 ..	0·9 S	1·5 E	0·6 S	1·6 E	0·3 N	1·1 E	0·1 S	1·4 E	0·2 N	1·8 E	0·3 S	1·0 E	0·7 S	0·1 W	0·4 S	0·4 W	0·1 S	0·9 E	0·7 S	1·5 E	1·1 S	1·4 E	0·7 S	1·3 E	0·4 S	1·1 E
1 „ 2 ..	1·0 S	2·1 E	0·9 S	1·7 E	0·4 N	0·9 E	0·3 S	1·8 E	0·0	1·7 E	0·5 S	0·4 E	0·2 S	0·5 W	0·6 S	0·2 W	0·7 S	0·3 E	0·6 S	1·6 E	0·8 S	1·6 E	1·0 S	1·8 E	0·5 S	1·1 E
2 „ 3 ..	1·2 S	2·8 E	0·3 S	1·5 E	0·2 N	1·7 E	0·1 S	2·1 E	0·1 S	2·1 E	0·4 S	0·4 E	0·2 S	0·7 W	0·3 S	0·0	0·4 S	0·7 E	0·1 S	2·1 E	0·7 S	1·8 E	1·0 S	2·5 E	0·4 S	1·4 E
3 „ 4 ..	0·7 S	3·3 E	0·4 S	2·2 E	0·1 S	2·9 E	0·7 S	2·7 E	0·9 S	2·2 E	0·3 N	0·5 E	0·1 S	0·7 W	0·4 S	0·3 W	0·3 S	0·4 E	0·1 S	2·9 E	1·0 S	3·2 E	1·0 S	2·6 E	0·4 S	1·8 E
4 „ 5 ..	1·0 S	3·4 E	0·3 S	2·6 E	0·1 S	3·3 E	0·8 S	3·4 E	1·2 S	2·5 E	0·1 S	0·6 E	0·0	0·6 W	0·4 S	0·0	0·1 S	0·2 E	0·1 S	3·6 E	0·5 S	3·8 E	1·2 S	2·9 E	0·5 S	2·1 E
5 „ 6 ..	0·7 S	3·8 E	1·0 S	2·9 E	1·2 S	4·8 E	1·0 S	4·2 E	1·0 S	3·0 E	0·0	1·4 E	0·4 N	0·5 W	0·1 N	0·1 E	0·4 S	1·1 E	0·3 S	4·4 E	0·6 S	4·0 E	1·2 S	3·2 E	0·6 S	2·7 E
6 „ 7 ..	0·8 S	3·4 E	1·3 S	4·4 E	1·8 S	5·7 E	1·0 S	4·4 E	1·0 S	2·7 E	0·3 N	1·5 E	0·7 N	0·1 E	0·4 N	0·3 E	1·1 S	1·8 E	1·5 S	5·2 E	0·8 S	4·7 E	1·5 S	4·0 E	0·8 S	3·2 E
7 „ 8 ..	0·8 S	4·0 E	2·1 S	4·4 E	2·1 S	6·2 E	0·9 S	5·1 E	1·0 S	2·3 E	0·7 S	2·1 E	1·0 N	0·7 E	0·2 N	0·5 E	1·0 S	1·8 E	1·0 S	5·0 E	0·7 S	5·2 E	1·7 S	4·2 E	0·9 S	3·5 E
8 „ 9 ..	1·4 S	5·0 E	1·9 S	4·8 E	1·7 S	6·1 E	0·7 S	4·8 E	0·7 S	1·9 E	0·3 S	1·6 E	0·9 N	0·5 E	0·1 S	0·3 E	0·8 S	1·7 E	1·1 S	4·8 E	1·0 S	5·3 E	1·3 S	4·4 E	0·8 S	3·4 E
9 „ 10 ..	1·3 S	4·6 E	1·6 S	4·5 E	1·5 S	4·3 E	0·8 S	3·2 E	0·5 S	0·8 E	0·5 S	1·2 E	0·3 N	0·3 E	0·3 N	0·2 E	1·0 S	1·2 E	1·8 S	4·0 E	1·7 S	5·3 E	1·8 S	4·8 E	0·9 S	2·9 E
10 „ 11 ..	1·1 S	3·4 E	2·0 S	2·9 E	1·1 S	1·2 E	1·0 S	0·3 E	0·6 S	0·6 W	0·8 S	0·8 E	0·2 N	0·3 E	0·1 S	0·5 E	0·4 S	0·5 E	1·8 S	2·9 E	1·6 S	4·2 E	2·1 S	4·1 E	1·0 S	1·7 E
11 „ 12 ..	1·4 S	1·5 E	1·0 S	0·4 W	0·8 S	1·9 W	0·4 S	1·9 W	0·3 S	1·5 W	0·5 S	0·5 W	0·4 N	0·0	0·0	0·2 W	0·3 S	0·1 E	2·0 S	0·5 E	1·8 S	1·7 E	2·2 S	0·6 E	0·9 S	0·2 W
12 „ 13 ..	1·0 S	0·2 W	0·2 S	3·0 W	0·5 S	4·2 W	0·2 N	3·7 W	0·2 N	2·5 W	0·3 S	1·2 W	1·0 N	0·1 E	0·3 N	1·0 W	0·4 N	1·2 W	1·7 S	1·5 W	1·8 S	0·4 W	1·2 S	2·1 W	0·4 S	1·7 W
13 „ 14 ..	0·4 S	2·9 W	0·8 N	4·8 W	0·1 S	5·4 W	0·4 N	4·7 W	0·6 N	3·3 W	0·0	1·6 W	0·5 N	0·2 W	0·7 N	0·3 W	0·7 N	2·1 W	0·7 S	4·7 W	1·3 S	4·4 W	0·9 S	4·0 W	0·0	3·2 W
14 „ 15 ..	0·4 N	5·4 W	1·5 N	5·3 W	0·5 N	5·7 W	0·5 N	5·5 W	0·7 N	4·1 W	0·5 S	2·1 W	0·6 N	0·6 W	0·4 N	0·7 W	0·4 N	2·6 W	0·2 S	6·2 W	0·4 S	5·8 W	0·1 N	5·4 W	0·3 N	4·1 W
15 „ 16 ..	0·7 N	6·2 W	1·8 N	5·3 W	1·3 N	6·1 W	0·8 N	5·8 W	0·9 N	4·0 W	0·3 N	2·4 W	0·1 N	0·3 W	1·0 N	1·0 W	0·6 N	2·1 W	1·0 N	6·8 W	0·4 N	7·3 W	1·2 N	5·6 W	0·8 N	4·3 W
16 „ 17 ..	1·3 N	6·2 W	2·1 N	5·1 W	1·9 N	5·9 W	1·3 N	5·6 W	1·0 N	4·0 W	0·3 S	1·6 W	0·7 N	0·6 W	0·3 N	0·7 W	0·7 N	2·2 W	2·2 N	6·3 W	1·8 N	7·1 W	2·1 N	5·2 W	1·3 N	4·2 W
17 „ 18 ..	1·8 N	5·6 W	1·8 N	4·5 W	2·2 N	5·1 W	1·3 N	4·3 W	1·1 N	2·8 W	0·1 S	1·8 W	0·1 S	0·4 W	0·7 N	0·1 E	0·5 N	1·0 W	2·3 N	5·7 W	2·6 N	6·3 W	3·2 N	5·0 W	1·4 N	3·5 W
18 „ 19 ..	3·0 N	5·0 W	1·4 N	3·7 W	2·1 N	3·4 W	0·9 N	3·4 W	0·9 N	1·5 W	0·8 N	1·4 W	0·3 S	0·4 E	0·0	0·1 W	0·8 N	1·3 W	3·1 N	4·1 W	4·2 N	5·1 W	3·7 N	4·3 W	1·7 N	2·7 W
19 „ 20 ..	2·7 N	3·9 W	1·8 N	2·1 W	1·7 N	2·1 W	0·6 N	1·5 W	0·5 N	0·6 W	0·7 N	0·4 W	0·5 S	0·8 E	0·1 N	0·2 E	0·4 N	0·6 W	2·9 N	2·7 W	4·3 N	4·0 W	4·0 N	3·4 W	1·6 N	1·7 W
20 „ 21 ..	2·5 N	2·9 W	1·7 N	1·0 W	0·9 N	1·0 W	0·4 N	0·0	0·4 N	0·1 E	1·1 N	0·5 W	0·8 S	0·6 E	0·1 S	0·6 E	0·7 N	0·2 E	1·9 N	1·8 W	2·6 N	2·3 W	3·0 N	2·3 W	1·2 N	0·9 W
21 „ 22 ..	1·3 N	1·2 W	0·6 N	0·4 W	0·4 N	0·1 E	0·3 N	1·0 E	0·6 N	0·7 E	0·7 N	0·1 E	0·6 S	0·1 E	0·5 S	0·3 E	0·4 N	1·1 E	1·4 N	0·3 W	0·7 N	0·5 W	1·7 N	1·1 W	0·6 N	0·0
22 „ 23 ..	0·3 N	0·4 E	0·1 S	0·7 E	0·1 N	1·2 E	0·1 N	1·3 E	0·2 N	1·2 E	0·6 N	0·5 E	1·4 S	0·5 E	0·4 S	0·9 E	0·4 N	0·9 E	0·3 S	0·6 E	0·1 S	0·2 E	0·3 N	0·6 E	0·0	0·7 E
23 „ 24 ..	0·8 S	1·1 E	0·3 S	1·0 E	0·1 S	1·2 E	0·2 N	1·3 E	0·4 N	1·5 E	0·0	0·9 E	1·5 S	0·7 E	0·7 S	0·5 E	0·3 N	1·2 E	0·1 S	1·4 E	0·9 S	1·0 E	0·4 S	1·2 E	0·3 S	1·1 E

Aggregate and Mean Velocities and relative Frequency of Different Winds, 1914.

TABLE VIe.—*Showing for the year 1914 the sums of the Velocities and the Mean Velocities, in miles per hour, of the Winds which blew in each month, from each of the sixteen Principal Directions and also the number of Hourly Observations which those sums comprise, the latter numbers indicating the Relative Frequency of the same Wind (as to direction) in the several Months, and of different Winds during the same month.*

1914.	N.			N. N. E.			N. E.			E. N. E.			E.			E. S. E.			S. E.			S. S. E.		
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.
January ..	228	58	3·9	202	55	3·7	243	62	3·9	768	153	5·0	361	85	4·2	146	30	4·9	0	0	0·0	0	0	0·0
February ..	428	66	6·5	209	48	4·4	91	22	4·1	258	50	5·2	61	13	4·7	97	23	4·2	57	11	5·2	86	18	4·8
March ..	245	41	6·0	223	54	4·1	85	18	4·7	184	36	5·1	85	22	3·9	111	26	4·3	0	0	0·0	62	8	7·7
April ..	3	1	3·0	73	23	3·2	64	18	3·6	49	12	4·1	26	5	5·2	31	8	3·9	24	6	4·0	74	12	6·2
May ..	8	2	4·0	29	10	2·9	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	91	10	9·1
June ..	0	0	0·0	21	5	4·2	18	3	6·0	50	12	4·2	111	25	4·4	101	11	9·2	75	10	7·5	516	41	12·6
July ..	10	2	5·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	5	1	5·0
August ..	21	4	5·2	1	1	1·0	2	2	1·0	18	3	6·0	14	3	4·7	34	7	4·9	2	1	2·0	0	0	0·0
September ..	0	0	0·0	26	7	3·7	42	10	4·2	105	27	3·9	33	12	2·7	36	12	3·0	73	16	4·6	220	42	5·2
October ..	81	22	3·7	284	80	3·5	206	55	3·7	800	141	5·7	192	39	4·9	287	57	5·0	70	21	3·3	15	4	3·7
November ..	192	46	4·2	293	73	4·0	290	67	4·3	1,337	212	6·3	210	37	5·7	225	39	5·8	23	2	11·5	4	1	4·0
December ..	375	78	4·8	387	89	4·3	202	43	4·7	884	160	5·5	191	32	6·0	205	50	4·1	0	0	0·0	0	0	0·0
Year.	1,591	320	5·0	1,748	445	3·9	1,243	300	4·1	4,453	806	5·5	1,284	273	4·7	1,273	263	4·8	324	67	4·8	1,073	137	7·8

1914.	S.			S. S. W.			S. W.			W. S. W.			W.			W. N. W.			N. W.			N. N. W.			Number of Observations.	
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Calm.	Variable.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.		
January ..	0	0	0·0	0	0	0·0	0	0	0·0	5	1	5·0	34	6	5·7	530	89	6·0	806	116	6·9	556	87	6·4	2	0
February ..	12	5	2·4	5	1	5·0	4	1	4·0	59	10	5·9	262	65	4·0	391	69	5·7	1,503	166	9·1	762	102	7·5	2	0
March ..	77	11	7·0	37	6	6·2	11	2	5·5	54	11	4·9	157	32	4·9	1,579	192	8·2	1,330	177	7·5	647	107	6·0	1	0
April ..	75	12	6·2	39	8	4·9	9	3	3·0	264	51	5·2	883	136	6·5	1,853	280	6·6	527	114	4·6	88	28	3·1	3	0
May ..	139	21	6·6	340	77	4·4	350	70	5·0	697	114	6·1	1,208	178	6·8	1,160	150	7·7	665	83	8·0	169	28	6·0	1	0
June ..	548	51	10·7	361	48	7·5	956	140	6·8	1,353	183	7·4	1,522	162	9·4	238	28	8·5	0	0	0·0	7	1	7·0	0	0
July ..	0	0	0·0	46	6	7·7	213	28	7·6	4,306	369	11·7	4,622	326	14·2	124	12	10·3	0	0	0·0	0	0	0·0	0	0
August ..	0	0	0·0	73	11	6·6	407	60	6·8	2,515	311	8·1	2,935	290	10·1	315	40	7·9	53	7	7·6	23	4	5·7	0	0
September ..	83	18	4·6	241	35	6·9	538	90	6·0	765	137	5·6	1,339	192	7·0	447	68	6·6	204	29	7·0	84	24	3·5	0	1
October ..	0	0	0·0	0	0	0·0	9	6	1·5	32	8	4·0	183	37	4·9	591	94	6·3	762	95	8·0	489	84	5·8	1	0
November ..	3	1	3·0	0	0	0·0	0	0	0·0	37	10	3·7	65	13	5·0	467	70	6·7	565	66	8·6	689	83	8·3	0	0
December ..	0	0	0·0	0	0	0·0	0	0	0·0	5	2	2·5	11	2	5·5	407	70	5·8	696	89	7·8	1,050	129	8·1	0	0
Year.	937	119	7·9	1,142	192	5·9	2,497	400	6·2	10,092	1,207	8·4	13,221	1,439	9·2	8,102	1,162	7·0	7,111	942	7·5	4,564	677	6·7	10	1

Velocity of Wind, 1914.

Dines's Anemograph.

Table VI*f*.—*Mean Velocity of the Wind in miles per hour for each day of Bombay Civil Time; also the Mean Monthly Velocity and its variation from the mean of the year.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	4·2	6·0	4·9	3·5	6·3	5·1	7·1	8·6	3·1	3·3	5·8	4·7
2 ..	4·0	7·3	7·6	4·7	4·8	6·2	6·5	8·2	3·3	4·7	6·5	5·8
3 ..	5·1	6·0	9·0	5·3	5·3	6·2	7·6	8·2	4·0	5·6	5·9	6·6
4 ..	3·2	5·8	6·9	Re-	7·0	5·6	8·0	10·4	4·5	4·5	7·2	5·2
5 ..	2·6	5·9	4·2	jected	6·3	5·8	10·2	8·5	4·5	5·5	4·2	4·6
6 ..	3·4	5·5	4·4	4·0	6·0	5·5	11·0	8·1	2·9	5·4	4·2	6·0
7 ..	4·1	6·2	6·0	4·1	5·1	6·5	12·5	5·5	3·9	6·2	3·5	5·2
8 ..	4·9	7·2	5·7	4·2	5·6	6·7	13·4	4·3	5·7	5·5	4·0	4·3
9 ..	6·9	6·9	6·8	5·8	5·2	7·0	12·3	5·1	5·3	3·6	3·2	4·7
10 ..	4·1	4·8	4·1	4·7	5·5	5·5	13·3	4 7	4·0	5·0	3·8	5·5
11 ..	5·4	6·3	6·0	4·5	6·5	4·8	11·3	5·9	6·8	4·4	4·7	6·1
12 ..	4·3	3·8	6·4	5·0	6·3	4·1	8·2	6·0	8·2	3·7	4·4	3·9
13 ..	4·0	3·3	10·5	6·0	9·8	4·7	8·4	6·1	4·9	4·3	4·2	4·2
14 ..	3·7	2·4	7·6	5·4	9·3	4·6	8·5	5·5	5·4	3·1	4·2	4·5
15 ..	3·9	5·6	5·3	5·3	6·8	8·5	11·0	8·3	6·2	3·3	5·4	3·7
16 ..	3·3	2·2	5·0	6·6	4·9	9·3	11·3	7·5	11·3	3·9	6·1	4·5
17 ..	3·5	4·9	5·2	5·7	5·0	9·0	13·3	5·3	9·6	3·5	5·3	4·0
18 ..	3·5	8·2	4·6	3·8	4·7	10·3	13·4	4·4	7·0	3·6	4·9	4·7
19 ..	3·6	7·0	6·8	4·9	6·4	9·5	13·4	5·7	4·3	4·8	5·2	7·1
20 ..	4·3	4·4	6·8	5·5	6·5	10·7	11·8	8·7	4·6	3·2	4·9	5·5
21 ..	6·1	4·7	4·5	5·7	8·0	10·5	9·8	9·8	3·6	4·9	3·9	6·2
22 ..	4·2	8·2	4·0	4·3	7·0	6·7	8·1	8·2	4·5	5·1	5·4	3·6
23 ..	4·7	10·7	4·9	6·7	5·1	5·6	9·7	7·5	3·2	6·9	5·3	5·6
24 ..	3·5	7·0	6·2	3·9	4·9	5·0	11·0	10·1	4·5	6·0	5·8	6·2
25 ..	4·1	4·6	5·5	4·8	3·8	6·0	14·1	8·6	5·8	5·3	5·8	6·4
26 ..	3·5	3·7	5·7	4·2	4·1	10·9	10·5	4·7	7·5	5·0	6·8	4·3
27 ..	5·0	3·3	5·2	3·0	4·7	12·7	9·9	5·4	3·9	5·0	7·5	3·2
28 ..	5·6	3·9	4·9	4·6	5·0	8·4	9·3	7·2	3·5	4·9	7·6	3·9
29 ..	4·9		5·8	4·3	5·0	6·2	8·5	7·9	3·3	4·6	7·0	5·7
30 ..	5·8		4·5	5·7	4·4	5·8	7·7	6·0	2·8	5·0	5·8	7·0
31 ..	5·8		3·6		3·7		7·1	3·7	.	4·5		5·3
Monthly Mean.	4·4	5·6	5·8	4·9	5·8	7·1	10·3	7·0	5·0	4·7	5·3	5·1
Annual Variation.	− 1·5	− 0·3	− 0·1	− 1·0	− 0·1	+ 1·2	+ 4·4	+ 1·1	− 0·9	− 1·2	− 0·6	− 0·8

	Miles.
The mean velocity for June to August ..	8·1
The mean velocity for September to May ..	5·2
The mean velocity for the year	5·9

Table VI*g*.—*Showing the mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year 1914 and for the whole year.*

1914. Bombay Civil Time Hourly Intervals	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1	− 1·6	− 2·4	− 1·6	− 1·6	− 1·5	− 0·7	− 0·1	+ 0·2	− 0·6	− 1·5	− 1·9	− 1·6	− 1·2
1 „ 2	− 1·4	− 2·0	− 1·4	− 1·7	− 1·5	− 0·2	+ 0·2	+ 0·3	− 0·5	− 1·5	− 1·7	− 1·6	− 1·1
2 „ 3	− 0·9	− 1·2	− 1·6	− 1·6	− 1·6	− 0·1	+ 0·3	+ 0·3	− 0·7	− 1·5	− 1·6	− 1·1	− 0·9
3 „ 4	− 0·4	− 1·3	− 2·0	− 1·8	− 1·4	− 0·3	+ 0·6	+ 0·1	− 0·5	− 0·8	− 0·5	− 0·8	− 0·8
4 „ 5	− 0·3	− 0·7	− 2·2	− 1·9	− 1·3	− 0·1	+ 0·5	0·0	− 0·2	− 0·3	− 0·3	− 1·0	− 0·6
5 „ 6	0·0	− 0·9	− 2·0	− 1·7	− 1·4	+ 0·1	+ 0·2	0·0	− 0·3	+ 0·1	0·0	− 0·9	− 0·6
6 „ 7	− 0·4	− 1·0	− 2·0	− 2·2	− 1·3	− 0·1	− 0·3	− 0·3	0·0	+ 0·7	+ 0·6	− 0·4	− 0·6
7 „ 8	− 0·4	− 1·3	− 2·1	− 2·0	− 1·1	+ 0·1	− 0·3	− 0·5	+ 0·1	+ 0·3	+ 0·8	− 0·6	− 0·6
8 „ 9	0·0	− 1·1	− 1·6	− 1·6	− 0·5	+ 0·1	− 0·6	− 0·5	0·0	+ 0·2	+ 0·9	− 0·1	− 0·4
9 „ 10	0·0	− 0·6	− 1·5	− 1·5	− 0·2	− 0·2	− 0·5	0·0	+ 0·2	− 0·3	+ 0·6	− 0·1	− 0·3
10 „ 11	− 0·5	− 1·0	− 1·0	− 0·8	+ 0·5	− 0·1	− 0·2	− 0·3	+ 0·0	− 1·0	− 0·7	− 0·8	− 0·5
11 „ 12	− 1·4	− 0·5	− 0·1	+ 0·3	+ 0·8	+ 0·2	− 0·2	+ 0·3	0·0	− 1·6	− 1·5	− 1·1	− 0·4
12 „ 13	− 1·2	+ 0·7	+ 1·4	+ 2·0	+ 1·5	− 0·1	− 0·4	+ 0·5	0·0	− 1·2	− 1·7	− 0·4	+ 0·1
13 „ 14	− 0·2	+ 2·2	+ 2·4	+ 3·1	+ 2·3	+ 0·4	− 0·1	+ 0·2	+ 0·8	− 0·2	− 0·7	+ 0·1	+ 0·9
14 „ 15	+ 1·1	+ 2·9	+ 3·1	+ 3·6	+ 2·8	+ 0·9	+ 0·2	+ 0·2	+ 1·2	+ 1·1	+ 0·6	+ 0·9	+ 1·5
15 „ 16	+ 1·7	+ 3·0	+ 3·8	+ 4·3	+ 2·7	+ 0·6	+ 0·1	+ 1·0	+ 1·0	+ 1·9	+ 1·5	+ 1·6	+ 1·9
16 „ 17	+ 2·1	+ 2·9	+ 3·9	+ 4·1	+ 2·6	+ 0·9	+ 0·4	+ 0·6	+ 1·2	+ 2·3	+ 2·3	+ 2·2	+ 2·1
17 „ 18	+ 2·0	+ 2·3	+ 3·5	+ 3·2	+ 1·7	+ 0·5	+ 0·4	− 0·1	+ 0·6	+ 2·1	+ 3·2	+ 2·6	+ 1·8
18 „ 19	+ 2·3	+ 1·8	+ 2·4	+ 2·1	+ 0·5	+ 0·3	− 0·2	0·0	+ 0·5	+ 2·2	+ 2·6	+ 2·7	+ 1·4
19 „ 20	+ 1·8	+ 1·1	+ 1·4	+ 0·6	0·0	− 0·3	− 0·4	− 0·2	− 0·2	+ 1·2	+ 2·2	+ 2·4	+ 0·8
20 „ 21	+ 0·9	+ 0·2	+ 0·2	− 0·9	− 0·4	0·0	− 0·2	− 0·3	− 0·4	0·0	+ 0·3	+ 1·0	0·0
21 „ 22	− 0·7	− 0·7	− 0·8	− 1·5	− 1·1	− 0·1	+ 0·2	− 0·3	− 0·7	− 1·1	− 1·3	− 0·2	− 0·7
22 „ 23	− 1·4	− 1·4	− 1·5	− 1·8	− 1·3	− 1·0	− 0·4	− 0·6	− 0·8	− 1·1	− 2·0	− 1·2	− 1·2
23 „ 24	− 1·7	− 1·8	− 1·7	− 1·6	− 1·4	− 0·4	− 0·1	− 0·5	− 0·8	− 1·2	− 2·0	− 1·6	− 1·2
Range.	4·0	5·4	6·1	6·5	4·4	1·9	1·2	1·6	2·0	3·9	5·2	4·3	3·3

Temperature of the Ground, 1914.

TABLE VIIa.—*Showing for each month the Mean Temperature of the Ground in the thermometer shed and its annual variation at the respective depths of 1, 9, 20, 60 and 132 inches below the surface.*

Depth.	1 Inch.		9 Inches.		20 Inches.		60 Inches.		132 Inches.	
Month.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.
	°	°	°	°	°	°	°	°	°	°
January ..	77·3	−4·7			79·9	−3·6	82·5	−1·5	82·9	−0·4
February.	**77·0**	−5·0			**79·6**	−3·9	**81·7**	−2·3	82·6	−0·7
March ..	79·0	−3·0			80·1	−3·4	81·8	−2·2	**82·4**	−0·9
April ..	82·8	+0·8	*80·8		82·6	−0·9	82·6	−1·4	83·1	−0·2
May ..	**87·3**	+5·3	84·9		85·9	+2·4	84·3	+0·3	83·3	0·0
June ..	85·9	+3·9	85·1		**87·3**	+3·8	**86·1**	+2·1	83·6	+0·3
July ..	83 0	+1·0	83·3		86·1	+2·6	86·1	+2·1	83·7	+0·4
August ..	81·8	−0·2	81·4		84·3	+0·8	85·1	+1·1	**84·0**	+0·7
September	82·4	+0·4	81·8		84·1	+0·6	84·5	+0·5	83·9	+0·6
October ..	85·0	+3·0	83·2		84·8	+1·3	84·6	+0·6	83·8	+0·5
November.	83·5	+1·5	82·5		85·0	+1·5	84·8	+0·8	83·4	+0·1
December.	78·5	−3·5	78·7		82·7	−0·8	84·3	+0·3	83·2	−0·1
Year.	82·0				83·5		84·0		83·3	

TABLE VIIb.—*Showing for each of the five observation hours and for the mean of the day the Temperature of the Ground exposed to the direct rays of the sun at the depths of 1 inch and 8 inches below the surface.*

Depth from Surface.	1 Inch.						8 Inches.					
Month.	Observation Hours.					Mean of five observation hours.	Observation Hours.					Mean of five observation hours.
	6	10	14	16	22		6	10	14	16	22	
	°	°	°	°	°	°	°	°	°	°	°	°
January ..	71·8	83·0	110·4	98·4	77·5	88·2	78·6	77·9	78·8	79·4	80·3	**79·0**
February .	73·1	81·0	108·8	106·3	79·2	89·7	80·3	79·5	80·4	81·4	82·6	80·8
March ..	76·1	88·0	116·1	113·4	82·8	95·3	86·2	85·1	86·5	88·2	89·2	87·0
April ..	82·8	96·2	122·7	120·4	89·6	102·3	93·8	92·7	94·6	96·4	97·5	95·0
May ..	89·5	103·4	123·0	120·0	94·2	**106·0**	100·5	99·4	101·3	103·0	103·9	**101·6**
June ..	85·6	93·7	104·1	100·5	87·8	94·4	93·1	93·1	94·4	96·1	95·1	94·4
July ..	81·2	85·7	89·9	88·7	82·7	**85·6**	85·9	85·3	86·2	87·0	87·3	86·4
August ..	80·2	85·7	92·6	91·3	81·8	86·3	84·0	83·7	85·0	86·0	86·1	85·0
September.	80·9	87·5	98·4	95·7	82·9	89·1	84·4	83·9	85·5	86·8	87·0	85·5
October ..	83·5	97·1	117·7	110·7	88·6	99·5	87·5	86·7	88·6	89·7	89·9	88·5
November.	80·0	94·0	115·6	101·4	84·9	95·2	84·8	84·1	84·9	85·5	86·3	85·1
December .	73·2	86·7	111·9	94·9	79·6	89·3	79·7	79·2	80·1	80·7	81·3	80·2
Year.	79·8	90·2	109·3	103·5	84·3	93·4	86·6	85·9	87·2	88·3	88·9	87·4

* A new thermometer No. 203096 by C. F. Cassella was put in March in place of an old one which was found broken in October 1912.

Maxima and Minima of different Meteorological Elements, 1914.

TABLE VIII.—*In which are collected the individual observations in each month of the year, which showed the greatest and the least values of the following elements, viz., Height of Barometer corrected for Temperature, Temperature of Air, Pressure of Vapour and Additional Capacity of Air, and Ground temperatures, 1 inch and 8 inches below the surface (exposed to solar rays.)*

1914.	Height of Barometer.			Temperature of Air.			Pressure of Vapour.			Additional Capacity.			Ground Thermometer 1 inch deep.			Ground Thermometer 8 inches deep.		
Month.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.
	In.	In.	In.	°	°	°	In.	In.	In.	In.	In.	In.	°	°	°	°	°	°
January	30·182	29·864	0·318	87·4	68·2	19·2	0·791	0·421	0·370	0·789	0·067	0·722	114·6	68·9	45·7	80·8	76·9	3·9
February	·077	·825	·252	84·6	62·9	21·7	·789	·252	·537	·769	·059	·710	113·6	67·0	46·6	85·4	77·4	8·0
March	·076	·741	·335	86·3	68·5	17·8	·935	·200	·735	·813	·061	·752	120·7	70·2	50·5	93·5	82·0	11·5
April	29·996	·677	·319	89·6	74·3	15·3	·992	·662	·330	·562	·082	·480	126·5	79·0	47·5	102·0	89·5	12·5
May	·937	·613	·324	91·2	80·7	10·5	1·085	·833	·252	·547	·126	·421	126·0	87·0	39·0	106·0	97·2	8·8
June	·803	·481	·322	92·5	77·1	15·4	·048	·818	·230	·529	·042	·487	122·0	78·0	44·0	107·5	82·6	24·9
July	·738	·505	·233	88·7	75·1	13·6	·059	·818	·241	·327	·021	·306	104·0	75·0	29·0	93·7	79·7	14·0
August	·870	·572	·298	85·6	76·0	9·6	·004	·813	·191	·307	·025	·282	103·0	77·6	25·4	89·1	80·3	8·8
September	·948	·474	·474	86·8	76·8	10·0	·031	·801	·230	·359	·020	·339	111·0	77·5	33·5	90·1	79·8	10·3
October	30·020	·735	·285	92·5	76·8	15·7	·041	·533	·508	·851	·084	·767	123·2	80·9	42·3	92·1	85·0	7·1
November	·087	·753	·334	92·5	73·3	19·2	0·981	·453	·528	·887	·097	·790	122·8	74·0	48·8	88·6	80·6	8·0
December	·094	·785	·309	89·6	66·6	23·0	·846	·379	·467	·895	·081	·814	116·0	66·3	49·7	84·2	75·9	8·3
Year.	30·182	29·474	0·708	92·5	62·9	29·6	1·085	0·200	0·885	0·895	0·020	0·875	126·5	66·3	60·2	107·5	75·9	31·6

Relative Humidity of the Air, 1914.

TABLE IX*a*.—*Daily and monthly means of observations taken at 6, 10, 14, 16 and 22 hours daily.*

Complete Saturation=1·000.

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	0·779	0·731	0·739	0·763	0·785	0·716	0·808	0·901	0·817	0·812	0·647	0·729
2	·614	·687	·732	·762	·768	·725	·799	·877	·796	·793	·646	·651
3	·690	·692	·640	·727	·755	**·705**	·839	·871	**·779**	·810	·634	·573
4	·693	·692	·638	·741	·743	·742	**·790**	·882	·805	·822	·717	·564
5	**·795**	·627	·727	·753	·719	·705	·838	·884	·792	·802	·756	·661
6	·760	·698	·766	·736	·709	·734	·854	·892	·882	**·823**	**·814**	·682
7	·617	·697	·757	**·666**	·723	·744	·839	·885	·821	·816	·761	·691
8	·667	·627	·790	·735	·712	·737	·850	·842	·861	·820	·781	·737
9	**·564**	·610	·772	·698	·709	·750	·856	·882	·816	·804	·795	·746
10	·616	·679	·750	·689	·713	·743	·845	·876	·795	·687	·758	·631
11	·595	·629	·724	·693	·709	·746	·831	·860	·807	·710	·687	**·511**
12	·684	·667	·671	·699	·706	·790	·814	·852	·929	·727	·723	·623
13	·605	·742	**·461**	·743	·726	·821	·837	**·905**	·926	·775	·682	·689
14	·648	·772	·527	·711	·764	·824	·873	·880	·927	·794	·670	·735
15	·744	·767	·590	·742	**·796**	·787	·831	·882	**·945**	·754	·646	·751
16	·744	·759	·741	·713	·781	·873	·830	·833	·945	·761	·691	**·780**
17	·700	**·807**	·734	·741	·765	·843	·899	·847	·873	·746	·703	·764
18	·690	·599	·714	·763	·714	·843	·842	·881	·886	·757	·674	·757
19	·693	**·502**	·682	·750	·729	·828	·837	·886	·881	·690	·611	·688
20	·739	·597	·673	·761	·726	·861	·892	·858	·843	·726	·617	·739
21	·586	·728	·712	·797	·752	·890	·895	·816	·834	·725	·627	593
22	·619	·713	·741	**·805**	·777	**·912**	·884	·839	·818	·698	·627	·642
23	·668	·609	·760	·785	·771	·856	·938	·870	·854	·601	·584	·566
24	·649	·648	·762	·769	·723	·828	·916	·834	·862	**·580**	·556	·578
25	·671	·707	·798	·762	·741	·833	·940	·827	·842	·616	·604	·594
26	·705	·706	·732	·787	·730	·895	·890	·811	·855	·710	·563	·639
27	·701	·753	·754	·790	·721	·879	·860	·822	·860	·608	**·485**	·637
28	·668	·708	·786	·773	·725	·826	·898	·813	·818	·601	·557	·619
29	·648		·805	·770	·710	·813	·914	·820	·828	·656	·584	·659
30	·729		**·810**	·780	**·698**	·817	·952	**·808**	·817	·626	·643	·621
31	·762		·800		·698		**·957**	·810		·647		·629
Monthly Mean	0·679	0·684	0·784	0·747	0·735	0·802	**0·866**	0·856	0·850	0·726	**0·661**	0·661
Annual Variation.	−·075	−·070	+·030	−·007	−·019	+·048	+·112	+·102	+·096	−·028	−·093	−·093

Annual Mean .. In. 0·754

Extent of Cloudy Sky, 1914.

TABLE IX*b*.—*Daily and monthly means of observations taken at 6, 10, 14, 16 and 22 hours daily, the whole sky being reckoned as 10·0.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	**6·0**	1·0	1·6	1·8	1·6	4·0	5·8	**10·0**	5·0	2·2	1·2	5·6
2	5·2	..	2·8	0·6	1·6	4·0	5·6	9·8	4·0	1·6	2·0	1·4
3	4·8	..	..	0·2	3·2	5·0	8·2	9·8	5·8	4·0	3·4	**1·4**
4	4·0	..	..	0·8	3·6	4·4	8·2	9·8	4·4	1·6	7·2	2·8
5	5·8	..	..	2·4	3·4	3·0	**10·0**	10·0	6·0	2·0	7·2	5·8
6	4·0	0·2	..	3·2	3·6	5·0	9·8	8·8	7·0	3·6	**8·0**	1·0
7	4·0	1·8	0·4	1·8	3·6	4·6	9·6	8·0	7·4	4·0	5·0	1·4
8	0·2	0·6	1·8	**3·4**	3·2	7·0	9·2	5·6	9·2	4·8	4·6	3·2
9	..	..	1·2	1·8	4·0	4·6	10·0	8·0	7·8	3·6	1·2	6·0
10	..	1·0	**3·6**	0·4	4·8	3·0	8·4	5·8	4·6	3·2	3·6	4·6
11	..	..	2·4	3·0	2·0	**2·4**	8·8	6·2	6·0	1·0	3·6	0·8
12	..	..	0·4	3·4	1·4	7·2	7·8	6·0	9·6	2·2	2·4	1·6
13	..	2·4	..	2·0	1·6	8·0	**5·6**	9·2	9·0	4·0	1·6	**7·0**
14	..	2·8	..	3·4	2·0	6·0	8·0	8·6	**10·0**	2·6	3·6	3·4
15	..	5·2	..	1·2	5·0	5·0	7·0	9·0	10·0	1·8	0·8	6·2
16	1·0	**6·0**	..	..	5·0	9·0	8·0	9·2	10·0	6·2	1·4	2·8
17	..	5·0	0·4	..	1·2	8·4	9·0	10·0	9·2	6·0	2·6	1·8
18	1·0	1·4	..	2·0	1·6	8·4	9·8	8·2	9·6	**7·0**	1·6	3·0
19	0·2	1·0	1·4	1·4	3·8	9·0	7·8	7·6	7·0	5·6	1·0	1·0
20	3·0	0·8	1·8	0·6	2·4	8·4	10·0	8·0	3·8	6·0	1·6	0·6
21	4·8	0·4	..	0·2	2·8	**10·0**	10·0	8·0	5·4	1·6	1·0	..
22	3·4	0·6	1·6	..	1·4	10·0	9·4	7·2	5·4	2·6	1·4	..
23	..	..	0·6	0·2	1·0	9·2	10·0	9·6	4·4	2·4	**2·8**	..
24	..	..	0·4	1·0	3·4	8·0	10·0	9·2	4·4	**0·4**	**1·8**	..
25	..	0·4	..	1·0	**6·0**	8·0	10·0	8·0	4·2	1·0	**1·4**	..
26	..	1·2	..	2·0	3·4	9·8	9·6	6·0	5·2	2·4	**1·0**	..
27	..	1·2	..	3·0	4·0	10·0	8·6	5·0	7·2	4·4	**1·4**	..
28	..	5·4	0·6	1·0	3·6	6·8	9·6	6·0	5·8	1·6	**0·6**	0·2
29	..		2·2	2·2	3·8	4·2	8·8	6·0	**3·2**	3·4	**2·0**	0·2
30	..		3·6	1·4	4·4	4·8	10·0	**4·6**	4·2	1·4	**2·4**	..
31	..		3·2		4·2		10·0	5·8		3·0		
Monthly Mean.	1·5	1·4	**1·0**	1·5	3·1	6·6	**8·8**	7·8	6·5	3·1	2·6	2·0
Annual Variation.	−2·3	−2·4	−2·8	−2·3	−0·7	+2·8	+5·0	+4·0	+2·7	−0·7	−1·2	−1·8

For the days which have no entry, 0·0 is to be understood.

Mean of the months from January to April, November and December .. .. .. 1·7

Mean of the months from May to October 6·0

Mean for the year .. 3·8

TABLE X.—*Five-day Means, 1914.*

Number of Five-day Period.	Barometric Pressure.	Temperature of the air.	Pressure of Vapour.	Additional Capacity of the air.	* Rainfall.	North or South Component of Wind.	East or West Component of Wind.	Number of five-day Period.	Barometric Pressure.	Temperature of the air.	Pressure of Vapour.	Additional Capacity of the air.	* Rainfall.	North or South Component of Wind.	East or West Component of Wind.
	In.	°	In.	In.	In.	Miles.	Miles.		In.	°	In.	In.	In.	Miles.	Miles.
1	30·058	74·8	0·638	0·230	....	2·3 N	0·5 E	38	29·627	83·1	0·959	0·173	1·91	1·2 S	14·1 W
2	·074	76·7	·633	·292	....	2·9 N	1·3 E	39	·623	83·1	·960	·174	1·35	2·5 S	11·7 W
3	·006	76·0	·615	·290	....	2·8 N	0·8 E	40	·631	82·4	·940	·167	3·04	3·7 S	14·7 W
4	29·976	76·4	·670	·247	....	1·7 N	0·6 E	41	·561	80·0	·927	·097	10·97	2·4 S	11·7 W
5	·950	75·5	·590	·299	....	3·4 N	0·1 W	42	·622	79·2	·902	·098	8·77	1·8 S	12·4 W
6	·943	75·0	·630	·244	....	3·5 N	1·4 W	43	·619	79·3	·915	·087	6·23	3·2 S	8·5 W
7	·965	74·3	·618	·235	....	5·3 N	1·8 W	44	·714	80·4	·917	·119	1·93	2·3 S	8·8 W
8	·938	75·6	·601	·287	....	5·6 N	2·4 W	45	·754	80·3	·911	·125	3·32	1·9 S	5·7 W
9	·966	75·5	·643	·246	....	2·3 N	1·4 W	46	·653	80·6	·905	·139	3·04	1·0 N	6·2 W
10	·951	73·0	·580	·235	0·08	3·3 N	1·4 W	47	·719	80·3	·888	·146	1·73	0·8 S	9·6 W
11	·928	75·7	·612	·282	....	4·6 N	3·0 W	48	·741	81·2	·882	·184	0·66	1·0 S	9·4 W
12	·929	75·3	·649	·233	....	1·3 N	2·4 W	49	·817	82·0	·894	·202	0·33	2·4 S	5·0 W
13	·898	76·2	·649	·260	....	4·6 N	3·1 W	50	·753	81·5	·882	·193	0·54	1·4 S	3·8 W
14	·885	76·4	·707	·205	....	3·7 N	3·8 W	51	·737	81·2	·905	·163	3·84	1·4 S	5·9 W
15	·897	76·5	·571	·348	....	5·1 N	2·3 W	52	·577	79·0	·922	·070	15·17	2·8 S	6·7 W
16	·939	75·4	·644	·240	....	3·4 N	3·4 W	53	·844	80·5	·897	·145	0·81	2·2 S	3·7 W
17	·875	77·2	·726	·211	....	3·0 N	3·5 W	54	·834	81·1	·917	·147	0·63	2·3 N	1·6 W
18	·845	80·0	·825	·203	....	0·2 N	3·0 W	55	·850	82·7	·929	·191	0·01	0·6 N	0·9 W
19	·844	79·3	·777	·230	....	1·9 N	3·8 W	56	·837	82·8	·927	·196	0·01	3·5 N	1·8 W
20	·882	79·6	·728	·285	0·07	1·5 N	3·9 W	57	·891	83·9	·881	·283	....	3·1 N	0·5 W
21	·894	79·5	·736	·275	....	2·4 N	5·3 W	58	·879	83·3	·883	·260	....	1·4 N	0·3 E
22	·861	80·8	·799	·255	....	2·2 N	4·5 W	59	·917	84·1	·857	·320	....	2·2 N	0·8 E
23	·843	82·5	·892	·223	....	0·5 N	4·0 W	60	·920	83·2	·738	·405	....	2·7 N	1·1 E
24	·792	83·6	·923	·231	....	0·2 N	4·0 W	61	·902	83·4	·744	·404	....	2·5 N	0·8 E
25	·788	84·6	·923	·269	....	2·7 S	3·3 W	62	·844	82·6	·810	·312	0·18	2·4 N	1·9 E
26	·758	85·7	·900	·335	....	3·4 S	4·3 W	63	·860	83·5	·895	·258	....	2·1 N	0·3 E
27	·747	85·3	·927	·292	....	4·6 N	6·6 W	64	·846	83·0	·788	·348	....	3·3 N	0·4 W
28	·814	85·4	·934	·290	....	0·6 N	5·2 W	65	·854	81·3	·717	·357	....	3·4 N	0·1 E
29	·815	85·2	·939	·277	....	2·2 N	5·7 W	66	·921	79·7	·623	·398	....	3·7 N	1·6 E
30	·763	86·3	·921	·335	....	0·6 S	5·5 W	67	·919	78·8	·623	·369	....	3·7 N	3·1 E
31	·739	86·5	·932	·335	0·14	0·9 S	6·4 W	68	·903	79·3	·659	·350	....	3·1 N	2·5 E
32	·699	86·9	·965	·319	0·17	3·3 S	6·5 W	69	·886	76·8	·623	·304	....	4·2 N	0·6 W
33	·679	85·2	·962	·255	1·55	0·3 S	1·6 W	70	·898	75·3	·642	·240	....	2·6 N	1·1 W
34	·630	82·5	·936	·176	2·17	7·9 S	0·8 E	71	·896	76·2	·651	·258	....	4·7 N	0·9 W
35	·643	81·7	·948	·137	9·53	6·0 S	3·5 W	72	·980	74·3	·537	·318	....	3·6 N	0·7 E
36	·589	83·2	·973	·167	3·09	1·4 S	10·1 W	73	·996	75·0	·573	·302	....	4·0 N	0·7 E
37	·624	84·5	·972	·215	0·35	3·9 S	7·0 W								

* Five-day sums, *not means.*

Barometric Pressure, 1915.

TABLE Ia.—*Daily and Monthly Means.*

Height of the Barometer above mean Sea-level=37 feet.

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	29·969	29·930	29·905	29·873	29·799	29·720	29·667	**29·587**	29·796	29·795	29·799	29·954
2 ..	·963	·957	907	·884	·798	·757	·679	·623	·809	·767	·826	·961
3 ..	955	·932	·917	886	·749	**·766**	·674	·633	·810	·724	·850	·947
4 ..	·968	·894	·962	·879	·731	·759	·657	·626	·801	·707	·828	·944
5 ..	·982	·955	·956	·889	·720	·710	·694	·653	**·814**	·714	·779	·936
6 ..	30·002	**·970**	·892	·898	·707	·729	·755	·724	·791	**·684**	·733	·910
7 ..	·032	·910	·907	**·901**	·691	·740	·773	·749	·729	·688	**·705**	·917
8 ..	29·990	928	**30·008**	·886	·686	·748	·774	·718	·676	·737	·784	·945
9 ..	·940	·970	·004	·856	**·664**	·704	·777	·704	·630	·773	·887	·955
10 ..	·955	·960	29·962	·886	·697	·694	·773	·754	**·625**	·754	·887	·979
11 ..	·981	·915	·962	·895	·688	·685	**·811**	·790	·675	·762	·862	30·000
12 ..	·977	·875	·980	·848	·705	·674	·801	·811	·712	·803	·858	29·991
13 ..	·990	**·873**	·974	·811	·766	·670	·791	**·814**	·751	·853	·872	·988
14 ..	·983	·888	·936	·838	·790	·691	·728	·782	·785	·853	·853	·959
15 ..	·971	·903	·930	·887	·770	·684	·666	·776	·788	·821	·830	·931
16 ..	·999	·958	·950	·872	·739	·686	·629	·779	·779	·809	·841	·983
17 ..	30·024	·930	·963	·861	·732	·696	·600	·775	·797	·833	·836	·993
18 ..	**·040**	·910	·970	·800	·752	·706	·684	·752	·812	·819	·852	·964
19 ..	·020	·947	·983	**·747**	·799	·629	·673	·743	·802	·828	·886	·946
20 ..	29·963	·950	·937	·759	**·819**	·539	·573	·766	·774	·840	·922	·965
21 ..	·942	·903	·889	·791	·796	**·520**	**·510**	·722	·771	·828	·898	**30·002**
22 ..	·964	·913	**·802**	·759	·795	·536	·537	·700	·755	·809	·848	29·962
23 ..	·994	·921	·864	·795	·794	·566	·625	·723	·770	·802	·858	**·909**
24 ..	·963	·917	·900	·780	·815	·602	·700	·710	·778	·810	·861	·912
25 ..	·952	·925	·916	·789	·808	·579	·698	·699	·760	·808	·850	·914
26 ..	·963	·930	·863	·818	·804	·545	·703	·722	·733	·806	·829	·926
27 ..	·958	·912	·843	·800	·804	·539	·715	·742	·722	·823	·836	·916
28 ..	·952	·906	·881	·786	·809	·589	·656	·718	·687	·821	·879	·922
29 ..	·920		·892	·818	·812	·626	·621	·698	·702	·851	·921	·918
30 ..	**·873**		·898	·805	·766	·648	·593	·720	·765	**·872**	**·954**	·935
31 ..	·878		·883		·741		·583	·770		·828		·949
Monthly Mean.	**29·970**	29·924	29·924	29·836	29·760	**29·658**	29·681	29·725	29·753	29·794	29·847	29·949
Annual Variation.	+·152	+·106	+·106	+·018	−·058	−·160	−·137	−·093	−·065	−·024	+·029	+·131

Annual Mean .. .. In. ..29·818

TABLE Ib.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0.001 inch.

1915. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 7	+ 7	+ 4	+ 10	+ 9	+ 3	+ 6	+ 9	+ 5	+ 8	− 2	+ 2	+ 1	+ 5
1 7	− 3	− 8	− 5	− 8	− 9	− 10	− 8	− 10	− 7	− 17	− 11	− 10	− 9
2 7	− 15	− 22	− 20	− 18	− 23	− 22	− 22	− 23	− 21	− 28	− 22	− 22	− 21
3 7	− 24	− 28	− 25	− 27	− 25	− 25	− 27	**− 31**	− 26	− 31	− 25	− 27	− 27
4 7	− 23	− 27	− 23	− 22	− 20	− 23	− 26	− 31	− 25	− 26	− 22	− 23	− 24
5 7	− 15	− 17	− 13	− 9	− 11	− 9	− 21	− 23	− 14	− 15	− 11	− 11	− 14
6 7	+ 2	0	+ 4	+ 7	+ 5	+ 9	− 3	− 10	0	+ 6	+ 8	+ 6	+ 3
7 7	+ 23	+ 20	+ 25	+ 30	+ 25	+ 24	+ 12	+ 5	+ 20	+ 27	+ 29	+ 27	+ 22
8 7	+ 47	+ 41	+ 48	+ 49	+ 38	+ 36	+ 26	+ 22	+ 40	+ 49	+ 49	+ 53	+ 41
9 7	**+ 63**	+ 58	**+ 62**	**+ 61**	**+ 45**	**+ 39**	+ 36	+ 34	**+ 48**	**+ 59**	**+ 64**	**+ 67**	**+ 53**
10 7	+ 62	**+ 61**	+ 62	+ 56	+ 44	+ 37	**+ 38**	**+ 36**	+ 47	+ 55	+ 57	+ 63	+ 51
11 7	+ 42	+ 47	+ 47	+ 44	+ 36	+ 29	+ 32	+ 32	+ 35	+ 35	+ 36	+ 42	+ 38
12 7	+ 11	+ 23	+ 21	+ 22	+ 21	+ 13	+ 19	+ 19	+ 14	+ 9	+ 4	+ 11	+ 16
13 7	− 20	− 5	− 7	− 6	0	− 3	+ 3	+ 5	− 10	− 15	− 24	− 24	− 9
14 7	− 41	− 32	− 33	− 34	− 22	− 19	− 12	− 12	− 31	− 37	− 47	− 45	− 30
15 7	**− 52**	− 45	− 49	− 49	− 37	− 34	− 27	− 23	− 47	**− 47**	**− 55**	**− 55**	− 43
16 7	− 48	**− 46**	**− 53**	**− 56**	**− 47**	**− 43**	**− 37**	− 29	**− 48**	− 43	− 52	− 53	**− 46**
17 7	− 41	− 37	− 47	− 52	− 40	− 39	− 33	− 25	− 40	− 34	− 39	− 43	− 39
18 7	− 28	− 28	− 36	− 35	− 30	− 27	− 21	− 15	− 25	− 21	− 23	− 27	− 26
19 7	− 8	− 11	− 18	− 15	− 13	− 8	− 4	+ 3	− 7	− 2	− 1	− 5	− 7
20 7	+ 10	+ 6	+ 1	+ 2	+ 5	+ 7	+ 8	+ 10	+ 12	+ 16	+ 16	+ 12	+ 9
21 7	+ 22	+ 18	+ 15	+ 17	+ 16	+ 18	+ 18	+ 23	+ 28	+ 24	+ 24	+ 19	+ 20
22 7	+ 22	+ 20	+ 20	+ 24	+ 20	+ 23	+ 26	+ 29	+ 28	+ 20	+ 26	+ 20	+ 23
23 7	+ 14	+ 15	+ 19	6+ 20	+ 17	+ 17	+ 22	+ 23	+ 20	+ 12	+ 18	+ 12	+ 17
Range.	115	107	115	117	92	82	75	67	96	106	119	122	99

Temperature of the Air, 1915.

TABLE IIa.—*Daily and Monthly Means.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1	76·5	76·6	77·3	80·7	**84·1**	87·1	81·8	81·9	82·1	81·3	79·7	**80·2**
2	75·6	76·4	76·7	80·4	84·3	86·5	82·9	82·4	81·9	81·4	80·0	79·5
3	74·4	75·0	**75·1**	**79·9**	84·3	85·8	83·1	81·7	81·6	81·5	80·1	77·5
4	74·0	**69·4**	76·1	80·0	84·7	85·9	83·4	80·7	**82·2**	82·3	79·7	76·3
5	72·7	69·8	76·9	80·5	85·1	86·2	83·8	79·4	82·2	81·6	78·9	74·9
6	72·4	72·1	77·5	81·1	85·3	86·5	83·4	80·8	79·6	80·6	78·7	74·1
7	71·5	72·8	78·7	81·8	85·5	86·8	83·7	81·0	81·2	81·7	81·3	**74·0**
8	**70·9**	74·0	79·3	81·7	85·6	87·1	83·8	81·5	79·9	81·3	81·3	74·6
9	71·4	75·1	77·0	81·2	85·5	86·7	83·3	82·3	**77·9**	79·8	81·2	74·7
10	74·3	75·0	76·5	81·6	85·8	86·8	81·7	82·3	81·2	**79·1**	81·8	74·7
11	75·8	71·5	77·2	82·5	85·7	87·2	80·1	**82·6**	81·0	79·1	**83·0**	74·2
12	76·4	74·4	77·3	82·3	85·7	87·0	81·9	82·3	81·7	81·0	80·8	74·5
13	75·9	75·9	76·0	82·4	86·6	86·9	83·4	82·4	81·5	79·2	80·6	74·5
14	76·2	**76·7**	76·3	84·8	87·2	87·4	**84·2**	82·1	81·1	79·4	**78·5**	74·1
15	74·8	76·2	77·3	84·7	87·1	87·5	81·8	82·0	80·8	79·2	78·6	74·2
16	72·5	74·8	77·3	83·4	85·8	**87·7**	80·1	81·8	80·9	79·5	78·8	74·8
17	71·6	72·2	77·9	83·4	85·9	87·7	81·3	81·5	81·1	80·7	79·4	76·3
18	74·1	71·6	78·5	84·9	86·3	83·1	81·9	82·1	81·2	80·3	80·4	75·6
19	74·8	71·3	79·1	85·8	86·6	82·1	82·8	82·0	80·9	80·6	79·9	76·8
20	75·2	70·8	79·7	**85·9**	86·3	81·3	83·2	80·4	81·1	80·8	80·6	77·9
21	75·3	73·0	82·5	85·5	85·9	81·5	83·8	78·8	80·0	81·8	81·9	77·8
22	76·7	73·3	**82·7**	84·4	86·1	84·0	82·9	79·3	80·9	83·2	82·4	76·6
23	**76·8**	73·3	82·0	84·7	86·2	84·3	81·6	79·2	81·6	**84·2**	82·1	75·0
24	76·2	73·8	79·7	84·3	86·8	82·1	83·2	81·1	81·1	83·7	82·7	75·6
25	75·6	75·2	80·2	83·9	87·0	78·8	83·7	**77·9**	80·5	83·9	82·4	75·7
26	73·6	76·1	81·0	82·6	**87·3**	**78·6**	82·6	81·5	81·1	82·6	82·0	74·8
27	72·8	75·2	82·4	82·7	86·7	79·3	81·2	82·1	80·8	82·0	81·2	76·1
28	72·5	76·0	81·4	83·9	86·8	79·0	**78·3**	81·3	79·7	83·1	80·6	78·1
29	72·5		81·2	84·2	86·7	79·6	82·4	81·2	79·0	82·7	81·5	76·3
30	73·9		80·7	84·1	86·5	81·3	80·3	81·4	80·1	81·0	80·8	75·3
31	75·6		80·7		86·8		82·4	80·9		79·9		74·5
Monthly Mean.	74·3	**73·8**	78·8	83·0	**86·0**	84·4	82·4	81·2	80·9	81·2	80·7	75·8
Annual Variation.	− 5·9	− 6·4	− 1·4	+ 2·8	+ 5·8	+ 4·2	+ 2·2	+ 1·0	+ 0·7	+ 1·0	+ 0·5	− 4·4

Annual Mean — 80·2°

TABLE IIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

1915. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.	°	°	°	°	°	°	°	°	°	°	°	°	°
0 2	− 2·4	− 2·0	− 2·2	− 2·0	− 2·3	− 1·5	− 1·3	− 0·8	− 1·2	− 1·3	− 2·1	− 2·5	− 1·8
1 2	− 2·7	− 2·5	− 2·5	− 2·2	− 2·5	− 1·6	− 1·5	− 0·9	− 1·6	− 1·6	− 2·5	− 2·8	− 2·1
2 2	− 3·0	− 2·8	− 2·8	− 2·5	− 2·7	− 1·8	− 1·5	− 1·2	− 1·6	− 1·9	− 2·8	− 3·1	− 2·3
3 2	− 3·4	− 3·2	− 3·1	− 2·8	− 2·9	− 1·9	− 1·6	− 1·3	− 1·8	− 2·1	− 3·2	− 3·4	− 2·6
4 2	− 3·8	− 3·7	− 3·6	− 3·2	− **3·0**	− 2·0	− 1·5	− **1·5**	− 1·9	− 2·4	− 3·4	− 3·7	− 2·8
5 2	− 4·1	− 3·9	− 3·8	− 3·5	− 3·0	− 2·2	− **1·9**	− 1·4	− **2·2**	− 2·7	− 3·7	− 4·1	− 3·0
6 2	− 4·5	− 4·3	− **4·0**	− **3·8**	− 2·9	− **2·3**	− 1·7	− 1·5	− 2·2	− **2·9**	− **4·0**	− **4·4**	− **3·2**
7 2	− **4·8**	− **4·8**	− 3·5	− 2·7	− 1·9	− 1·6	− 1·3	− 1·2	− 1·8	− 2·5	− 3·6	− 4·2	− 2·8
8 2	− 3·4	− 3·0	− 1·8	− 1·1	− 0·6	− 0·7	− 0·7	− 0·6	− 1·0	− 1·4	− 2·3	− 3·1	− 1·6
9 2	− 1·5	− 1·0	− 0·3	+ 0·8	+ 0·8	+ 0·2	− 0·3	+ 0·1	− 0·2	− 0·3	− 0·7	− 1·7	− 0·3
10 2	+ 1·0	+ 1·3	+ 1·3	+ 2·3	+ 2·2	+ 1·2	+ 0·6	+ 0·7	+ 0·9	+ 1·0	+ 1·3	+ 0·4	+ 1·2
11 2	+ 3·1	+ 3·1	+ 2·9	+ 3·5	+ 3·0	+ 2·1	+ 1·7	+ 1·5	+ 1·6	+ 2·1	+ 3·1	+ 2·7	+ 2·5
12 2	+ 4·8	+ 4·3	+ 4·1	+ 4·0	+ 4·1	+ 2·9	+ 2·0	+ 2·0	+ 2·5	+ 3·0	+ 4·9	+ 4·4	+ 3·6
13 2	+ 5·7	+ 5·1	+ 4·9	+ **4·4**	+ **4·3**	+ **3·2**	+ **2·3**	+ 2·2	+ **2·9**	+ 3·4	+ **5·3**	+ 5·4	+ 4·1
14 2	+ **6·0**	+ **5·2**	+ **5·1**	+ 4·2	+ 4·3	+ 3·1	+ 2·3	+ **2·3**	+ 2·9	+ **3·6**	+ 5·3	+ **6·1**	+ **4·2**
15 2	+ 5·6	+ 5·0	+ 4·8	+ 3·9	+ 4·0	+ 2·9	+ 2·2	+ 2·1	+ 2·7	+ 3·4	+ 4·8	+ 5·8	+ 3·9
16 2	+ 4·6	+ 4·6	+ 4·1	+ 3·3	+ 3·3	+ 2·5	+ 2·1	+ 1·4	+ 2·1	+ 2·8	+ 3·6	+ 4·8	+ 3·3
17 2	+ 3·0	+ 3·3	+ 3·2	+ 2·0	+ 2·2	+ 1·8	+ 1·6	+ 0·9	+ 1·3	+ 1·7	+ 1·9	+ 3·0	+ 2·2
18 2	+ 1·5	+ 1·6	+ 1·2	+ 0·3	+ 0·5	+ 0·4	+ 0·6	+ 0·3	+ 0·3	+ 0·8	+ 1·0	+ 1·7	+ 0·8
19 2	+ 0·8	+ 0·8	+ 0·2	− 0·5	− 0·5	− 0·3	+ 0·1	− 0·2	0·0	+ 0·3	+ 0·5	+ 1·1	+ 0·2
20 2	+ 0·3	+ 0·3	− 0·3	− 0·8	− 1·0	− 0·7	− 0·1	− 0·3	− 0·4	+ 0·1	+ 0·2	+ 0·6	− 0·2
21 2	− 0·4	− 0·3	− 0·9	− 1·1	− 1·3	− 1·0	− 0·6	− 0·5	− 0·6	− 0·2	− 0·4	− 0·3	− 0·6
22 2	− 1·2	− 0·9	− 1·3	− 1·3	− 1·7	− 1·3	− 0·9	− 0·7	− 0·7	− 0·7	− 1·1	− 1·3	− 1·1
23 2	− 1·8	− 1·6	− 1·8	− 1·7	− 2·0	− 1·5	− 0·9	− 0·9	− 0·9	− 1·1	− 1·8	− 2·1	− 1·5
Range.	10·8	9·5	9·1	8·2	7·3	5·5	4·2	3·8	5·1	6·5	9·3	10·5	7·4

Temperature of the Air, 1915.

TABLE IIc.—*Showing the maximum Temperature of the Air on each day during the year* 1915.

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1	86·1	84·0	84·0	87·2	91·4	93·4	84·4	84·3	86·5	86·1	87·7	**87·9**
2	85·1	83·9	84·0	87·5	92·2	93·6	85·5	85·3	86·3	86·0	88·5	87·7
3	84·2	81·9	**82·3**	**87·1**	90·7	93·2	85·8	84·7	86·2	86·0	89·9	86·0
4	82·3	**78·0**	83·0	88·0	91·2	93·4	87·4	82·3	86·5	87·0	88·3	85·2
5	82·5	78·5	84·0	87·6	**90·5**	92·7	88·1	81·1	87·0	85·8	87·5	84·1
6	81·3	81·3	85·6	87·5	91·4	92·5	88·1	83·8	83·0	83·3	**86·1**	83·2
7	80·3	81·8	85·4	89·2	91·7	93·5	88·2	84·5	85·6	84·6	87·3	83·1
8	**80·2**	80·4	85·2	90·2	90·9	93·0	88·1	85·3	82·1	83·6	87·3	83·5
9	83·9	82·7	84·1	90·2	91·4	93·4	88·1	86·0	**79·6**	85·4	86·3	83·6
10	87·1	82·1	84·0	89·0	91·3	93·0	85·8	86·0	84·2	85·1	88·1	82·8
11	85·9	81·4	84·0	90·8	91·2	94·0	84·7	86·5	83·9	**82·5**	**91·7**	83·0
12	**87·2**	84·5	84·8	89·6	91·1	94·0	86·5	86·4	85·8	85·6	88·1	83·1
13	84·6	84·3	82·9	90·4	92·2	94·0	88·0	87·0	86·3	84·1	88·0	82·1
14	83·9	85·0	84·1	**93·0**	92·3	93·4	**89·1**	86·2	86·2	84·8	86·1	81·8
15	83·8	84·1	84·5	89·4	92·9	93·6	85·3	85·8	86·7	84·3	87·1	82·1
16	81·3	82·0	85·2	89·9	91·0	94·0	85·6	86·3	86·3	83·2	87·8	83·0
17	81·9	81·9	86·2	90·2	91·4	**94·2**	85·2	85·8	86·5	86·9	86·3	86·5
18	83·1	79·3	86·4	92·8	92·0	86·3	86·0	86·4	87·1	86·5	87·1	82·2
19	83·1	81·9	87·0	92·7	92·0	88·0	88·7	**87·1**	86·5	86·9	88·0	85·2
20	83·2	80·8	87·5	91·7	92·2	83·9	88·1	84·7	**87·5**	87·3	88·0	85·9
21	84·1	**86·9**	**92·2**	91·7	91·5	87·0	89·1	82·2	81·5	88·2	88·1	85·5
22	84·2	82·2	92·0	90·5	91·4	88·4	89·1	83·1	87·5	89·6	90·4	84·8
23	81·1	81·2	88·5	90·6	91·5	89·3	85·3	82·0	87·3	90·9	90·6	84·2
24	82·9	81·2	87·1	92·0	94·0	85·3	87·2	85·5	87·4	89·1	90·8	82·9
25	83·1	82·0	87·5	91·0	93·6	81·6	87·1	**79·2**	87·2	89·2	90·4	83·1
26	80·8	83·4	88·6	89·7	**94·2**	**80·4**	86·2	85·6	86·3	88·6	88·2	**77·3**
27	82·3	83·0	91·4	89·9	93·0	80·9	83·4	86·5	86·1	88·4	87·2	84·0
28	82·1	83·1	87·1	90·9	93·2	80·4	**79·7**	86·3	85·1	90·9	87·0	85·2
29	82·6		88·1	91·2	93·4	81·3	86·1	86·0	84·1	91·0	88·1	84·0
30	87·2		88·1	92·9	92·2	84·7	82·3	85·2	84·0	**91·1**	86·9	83·1
31	83·1		87·3		93·3		85·0	84·0		88·0		83·4
Monthly Mean	83·4	**82·2**	86·2	90·1	**92·0**	89·5	86·4	84·9	85·5	86·8	88·1	83·9

Annual Mean .. 86·6°
The greatest maximum temperature recorded during the year (that of 26th May) was .. 94·2°

TABLE IId.—*Showing the minimum Temperature of the Air on each day during the year* 1915.

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	°	°	°	°	°	°	°	°	°	°	°	°
1	71·5	**73·1**	73·0	76·4	**79·4**	83·2	78·6	79·4	78·4	77·6	73·3	**76·0**
2	69·2	72·8	73·7	76·6	80·7	83·3	80·6	79·4	77·9	78·4	74·6	74·6
3	66·7	72·5	**70·5**	76·5	80·2	82·6	80·9	79·2	78·4	78·6	74·4	72·4
4	68·4	69·3	72·3	76·0	81·2	83·2	80·8	79·2	78·5	79·4	74·6	70·5
5	65·4	63·5	72·3	76·6	81·5	82·0	81·2	77·4	78·8	78·2	73·8	68·6
6	66·4	65·3	71·8	77·8	81·6	82·5	80·4	77·4	76·2	78·2	**72·1**	67·8
7	65·3	66·4	73·5	76·2	82·2	82·4	80·4	78·0	78·4	78·8	77·9	**67·3**
8	64·8	69·3	75·4	77·4	81·9	83·4	80·5	78·4	76·4	79·8	77·4	68·5
9	**62·3**	71·3	73·3	**75·6**	82·2	82·3	79·9	78·4	**75·4**	75·4	78·2	69·5
10	67·6	72·3	71·3	76·4	82·4	82·4	79·4	**80·4**	76·4	**74·6**	**79·6**	70·3
11	70·3	62·8	72·5	76·9	82·2	83·0	76·6	80·2	**79·0**	76·2	78·6	69·3
12	71·3	66·8	74·0	76·5	81·5	83·4	77·4	79·4	78·4	78·2	74·1	69·7
13	70·4	70·3	72·4	77·6	83·2	82·6	79·4	79·6	77·9	75·8	76·4	70·1
14	71·5	71·5	70·5	77·8	83·2	83·6	80·4	79·4	76·5	76·2	72·1	68·5
15	68·3	71·2	72·3	81·4	83·8	84·0	80·4	80·0	76·5	75·0	73·5	69·1
16	67·3	72·5	71·4	79·5	83·6	84·2	77·0	79·4	77·4	77·2	73·5	68·3
17	64·3	64·3	72·3	80·5	82·4	**84·4**	77·6	79·8	77·4	78·2	74·4	70·5
18	68·3	65·0	73·3	81·0	82·8	78·9	78·6	78·4	77·4	76·4	75·0	71·3
19	70·5	**62·5**	73·3	81·2	83·4	78·4	76·4	79·4	77·3	76·8	73·3	72·3
20	71·2	63·3	74·4	80·8	83·2	79·4	80·4	76·5	76·4	77·1	75·2	71·9
21	70·3	64·3	75·4	81·2	81·9	78·8	81·2	76·4	76·8	77·2	78·4	73·3
22	71·3	66·6	76·0	80·0	82·4	79·8	79·4	**75·4**	77·4	79·6	78·8	71·5
23	**74·6**	69·0	**77·6**	**82·0**	82·1	80·8	77·2	76·4	78·8	79·6	77·4	69·1
24	73·5	68·3	74·8	79·2	82·3	79·4	79·4	77·4	77·8	**80·6**	77·6	70·3
25	72·1	70·8	76·0	79·2	**84·4**	77·4	**81·4**	75·4	76·5	80·4	78·0	70·3
26	68·5	72·0	76·0	78·2	83·6	77·4	79·4	75·4	76·4	79·2	77·6	71·3
27	67·6	70·3	76·2	78·4	83·4	**76·4**	78·2	78·5	78·0	78·4	76·9	70·7
28	63·5	72·0	76·5	80·4	83·8	77·2	**75·4**	79·0	76·8	77·4	75·6	74·5
29	65·3		75·7	80·2	83·0	77·4	75·4	77·7	76·4	78·2	76·0	72·0
30	65·3		75·6	80·0	82·6	78·6	77·5	77·4	77·2	76·2	77·5	69·8
31	69·1		76·4		82·4		79·4	77·0		75·5		69·3
Monthly Mean.	**68·5**	68·5	73·9	78·6	**82·4**	81·1	79·1	78·2	77·4	77·7	75·9	70·6

Annual Mean .. 76·0°
The least minimum temperature recorded during the year (that of 9th January) was .. 62·3°

Pressure of Vapour, 1915.

TABLE IIIa.—*Daily and Monthly Means.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	0·636	**0·753**	0·766	0·839	0·922	0·941	0·955	0·929	0·928	0·925	0·729	0·691
2	·590	·743	·716	·790	·914	·931	·938	**·945**	·906	·924	·758	·573
3	·504	·633	·699	·754	·928	·896	·951	·918	·895	·936	·767	**·492**
4	·573	·596	·706	·801	·927	·909	·938	·910	·884	·936	·697	·504
5	·524	·533	·731	·811	·930	·917	·954	·904	·874	·942	**·656**	·549
6	·563	·534	·709	·839	·923	·923	·933	·905	·853	·941	·676	·557
7	·403	·610	·764	·748	·934	·940	·925	·919	·874	·961	·767	·617
8	**·387**	·674	·798	·765	·907	·929	·918	·916	·894	·927	·873	·605
9	·461	·694	·694	**·715**	**·894**	·896	·900	·904	·890	·774	·878	·649
10	·566	·600	·672	·752	·894	**·885**	·904	·896	·925	·767	**·953**	·645
11	·545	·409	·667	·775	·915	·903	**·887**	·912	·920	·814	·855	·648
12	·547	·580	·701	·767	·913	·917	·923	·889	·911	·873	·776	·685
13	·613	·669	**·570**	·766	·960	·904	·920	**·862**	·869	·831	·762	·686
14	·645	·685	·572	·782	·980	·914	·928	·863	**·837**	**·753**	·663	·667
15	·505	·622	·633	·865	·976	·937	·933	·878	·861	·810	·730	·658
16	·421	·620	·663	·820	·957	·966	·935	·884	·862	·862	·716	·655
17	·525	·482	·696	·871	·904	**1·004**	·942	·886	·890	·830	·746	·617
18	·657	·483	·755	·867	·905	0·954	·949	·871	·896	·825	·728	·566
19	·682	**·394**	·763	·808	·927	·951	·959	·875	·862	·821	·766	·612
20	·680	·397	·833	·876	·922	·943	·989	·885	·902	·847	·802	·626
21	·646	·451	·799	·964	·940	·940	·983	·873	·905	·894	·839	·613
22	·680	·608	·744	**·968**	·908	·949	**1·003**	·881	·925	·952	·866	·598
23	**·755**	·613	**·907**	·954	·918	·967	0·969	·889	·925	·987	·868	·643
24	·717	·639	·829	·879	·942	·948	·967	·900	·921	**1·029**	·860	·656
25	·606	·668	·829	·851	·986	·932	·940	·864	**·937**	·993	·903	·677
26	·561	·681	·824	·849	**·997**	·931	·933	·911	·937	·901	·909	·725
27	·580	·694	·673	·840	·954	·943	·919	·913	·936	·909	·859	**·732**
28	·460	·737	·772	·941	·932	·943	·897	·891	·913	·868	·843	·714
29	·443		·824	·942	·936	·946	·935	·900	·899	·787	·837	·697
30	·529		·813	·866	·912	·947	·911	·890	·901	·764	·794	·626
31	·688		·845		·925		·929	·897		·759		·620
Monthly Mean.	**0·571**	0·600	0·741	0·836	0·932	0·933	**0·937**	0·896	0·898	0·876	0·796	0·632
Annual Variation.	− ·233	− ·204	− ·063	+ ·032	+ ·128	+ ·129	+ ·133	+ ·092	+ ·094	+ ·072	− ·008	− ·172

Annual Mean .. .. In. 0·804

TABLE IIIb.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity=0·001 inch.

1915. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 2	+ 3	+ 11	− 5	+ 4	− 9	− 7	− 10	− 4	− 13	− 7	− 6	+ 4	− 3
1 2	− 14	− 2	− 2	− 5	− 11	− 10	− 16	− 9	− 22	− 10	− 16	+ 5	− 9
2 2	− 19	− 8	+ 6	− 13	− 15	− 11	− 17	− 15	− 15	− 7	− 19	+ 2	− 11
3 2	− 26	− 12	− 1	− 16	− 17	− 15	− 21	**− 24**	**− 25**	− 6	− 20	− 3	− 15
4 2	− 37	− 19	0	− 24	**− 21**	− 12	− 17	− 20	− 19	− 17	− 30	− 8	− 19
5 2	**− 50**	− 24	− 8	− 30	− 19	− 17	**− 28**	− 20	− 20	− 21	− 42	− 18	− 25
6 2	− 48	− 24	**− 17**	**− 38**	− 15	**− 19**	− 20	− 21	− 19	**− 23**	**− 47**	− 28	**− 27**
7 2	− 46	− 25	− 9	− 34	− 11	− 16	− 18	− 10	− 9	− 14	− 41	− 33	− 22
8 2	− 42	− 25	− 7	− 29	− 3	− 12	− 2	+ 2	+ 9	− 5	− 28	− 32	− 15
9 2	− 42	**− 37**	+ 3	− 25	+ 6	− 5	+ 8	+ 6	+ 16	+ 4	− 26	− 27	− 10
10 2	− 24	− 17	− 8	− 9	+ 8	+ 4	+ 14	+ 15	+ 24	+ 13	− 10	− 18	− 1
11 2	− 11	− 5	− 7	+ 14	+ 13	+ 7	+ 25	+ 29	+ 27	+ 13	− 25	− 25	+ 5
12 2	− 8	0	− 8	+ 32	+ 13	+ 16	+ 25	**+ 30**	**+ 33**	+ 9	− 19	**− 37**	+ 7
13 2	+ 2	+ 3	+ 2	+ 29	**+ 17**	+ 17	+ 29	+ 25	+ 28	+ 13	− 6	− 37	+ 10
14 2	+ 53	+ 25	**+ 15**	**+ 33**	+ 15	+ 12	**+ 32**	+ 21	+ 29	+ 20	+ 27	− 19	+ 22
15 2	**+ 61**	+ 27	+ 13	+ 25	+ 16	+ 10	+ 22	+ 17	+ 18	**+ 21**	+ 42	+ 3	+ 23
16 2	+ 61	**+ 28**	+ 9	+ 21	+ 16	+ 19	+ 22	+ 4	+ 16	+ 16	+ 47	+ 26	**+ 24**
17 2	+ 52	+ 25	+ 7	+ 15	+ 15	**+ 20**	+ 12	+ 6	0	+ 5	+ 46	+ 34	+ 20
18 2	+ 50	+ 17	− 5	+ 8	+ 2	+ 13	− 7	+ 2	− 15	+ 1	+ 40	+ 49	+ 13
19 2	+ 43	+ 14	− 3	− 1	+ 1	+ 11	− 6	− 8	− 15	− 1	**+ 48**	+ 51	+ 11
20 2	+ 30	+ 18	+ 5	+ 6	+ 3	+ 8	− 3	− 2	− 11	+ 3	+ 43	**+ 52**	+ 13
21 2	+ 15	+ 15	+ 5	+ 5	− 2	+ 5	− 4	− 6	− 11	− 1	+ 36	+ 44	+ 8
22 2	0	+ 10	+ 10	+ 13	− 1	− 3	− 9	+ 5	− 5	− 3	+ 16	+ 24	+ 5
23 2	− 11	+ 7	− 1	+ 8	− 7	− 3	− 9	− 22	− 7	− 10	− 13	0	− 6
Range.	111	65	32	71	38	39	60	54	58	44	95	89	51

Additional Capacity of the Air, 1915.

TABLE IV*a*.—*Daily and Monthly Means.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 ..	0·283	0·168	0·174	0·211	0·254	0·351	0·130	0·161	0·168	0·146	0·289	0·343
2 ..	·302	·171	·208	·249	·267	·337	·187	·162	·185	·150	·273	·440
3 ..	·354	·235	·177	·270	·252	·343	·180	·164	·184	·141	·268	·457
4 ..	·268	·125	·198	·225	·269	·335	·206	·136	·217	·169	·323	·410
5 ..	·286	·203	·196	·233	·281	·338	·206	·100	·227	·137	·338	·328
6 ..	·238	·261	·239	·224	·296	·343	·211	·146	·159	·105	·309	·291
7 ..	·372	·203	·222	·342	·293	·338	·232	·139	·191	·122	·304	·227
8 ..	·372	·170	·205	·321	·323	·360	·244	·160	·128	·142	·197	·263
9 ..	·324	·181	·236	·354	·332	·380	·239	·198	·068	·246	·191	·216
10 ..	·294	·271	·245	·331	·345	·394	·179	·208	·141	·229	·140	·221
11 ..	·356	·370	·272	·340	·321	·393	·157	·204	·139	·182	·280	·201
12 ..	·370	·281	·239	·341	·322	·369	·168	·217	·174	·185	·281	·175
13 ..	·288	·230	·330	·341	·309	·382	·224	·247	·208	·167	·287	·179
14 ..	·262	·239	·341	·421	·315	·391	·246	·235	·225	·253	·316	·178
15 ..	·361	·284	·305	·329	·314	·369	·154	·214	·191	·191	·257	·187
16 ..	·381	·244	·280	·324	·279	·350	·095	·204	·192	·146	·276	·214
17 ..	·257	·312	·266	·275	·338	·310	·128	·192	·171	·218	·262	·298
18 ..	·193	·297	·226	·337	·352	·180	·142	·225	·172	·214	·315	·322
19 ..	·183	·378	·237	·432	·341	·148	·166	·220	·194	·224	·262	·317
20 ..	·197	·362	·186	·368	·334	·126	·146	·152	·162	·205	·245	·337
21 ..	·234	·374	·322	·262	·301	·137	·179	·113	·119	·192	·254	·340
22 ..	·243	·219	·382	·217	·343	·219	·126	·119	·131	·185	·250	·324
23 ..	·168	·211	·187	·240	·338	·211	·111	·107	·153	·190	·235	·233
24 ..	·187	·200	·191	·303	·338	·150	·172	·159	·141	·125	·265	·233
25 ..	·280	·211	·205	·314	·301	·050	·214	·095	·110	·173	·211	·215
26 ..	·270	·223	·239	·269	·301	·047	·184	·165	·129	·214	·186	·138
27 ..	·229	·183	·443	·283	·318	·057	·148	·184	·117	·186	·209	·173
28 ..	·345	·164	·302	·223	·345	·046	·071	·178	·102	·268	·204	·252
29 ..	·362		·244	·232	·337	·066	·173	·168	·093	·335	·243	·212
30 ..	·319		·238	·309	·353	·120	·122	·182	·128	·302	·260	·255
31 ..	·203		·207		·353		·178	·158		·268		·239
Monthly Mean.	0·283	0·242	0·250	0·297	0·315	0·255	0·172	0·171	0·157	0·194	0·258	0·265
Annual Variation.	+ ·045	+ ·004	+ ·012	+ ·059	+ ·077	+ ·017	− ·066	− ·067	− ·081	− ·044	+ ·020	+ ·027

Annual Mean .. Inch. 0·238

TABLE IV*b*.—*Mean diurnal inequality for each month of the year and for the whole year.*

Unity = 0·001 inch.

1915. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
0 2	− 72	− 71	− 69	− 78	− 86	− 54	− 39	− 26	− 29	− 41	− 65	− 82	− 59
1 2	− 64	− 71	− 80	− 77	− 91	− 56	− 37	− 26	− 31	− 48	− 73	− 89	− 62
2 2	− 66	− 73	− 97	− 78	− 94	− 61	− 37	− 27	− 38	− 61	− 78	− 96	− 67
3 2	− 70	− 79	−101	− 87	− 97	− 59	− 37	− 21	− 37	− 69	− 90	− 98	− 70
4 2	− 68	− 85	−116	− 91	− 96	− 66	− 37	− 33	− 46	− 69	− 87	−101	− 75
5 2	− 63	− 85	−113	− 94	− 98	− 68	− 38	− 31	− 54	− 73	− 84	−100	− 75
6 2	− 77	− 94	−112	− 97	−100	− 71	− 41	− 32	− 55	− 78	− 87	− 98	− 78
7 2	− 83	− 92	−104	− 64	− 66	− 49	− 27	− 32	− 50	− 75	− 78	− 89	− 67
8 2	− 55	− 60	− 54	− 12	− 27	− 19	− 25	− 22	− 44	− 48	− 55	− 57	− 40
9 2	− 5	+ 3	− 16	+ 52	+ 23	+ 12	− 20	− 5	− 22	− 20	− 2	− 24	− 2
10 2	+ 47	+ 48	+ 48	+ 89	+ 75	+ 41	+ 8	+ 10	+ 7	+ 18	+ 49	+ 26	+ 39
11 2	+ 99	+ 89	+100	+118	+108	+ 79	+ 36	+ 24	+ 31	+ 59	+131	+102	+ 81
12 2	+149	+123	+145	+121	+153	+101	+ 48	+ 42	+ 57	+ 99	+188	+172	+116
13 2	+172	+144	+164	+136	+157	+116	+ 56	+ 52	+ 75	+106	+195	+207	+132
14 2	+129	+124	+158	+126	+162	+118	+ 53	+ 61	+ 74	+108	+164	+210	+124
15 2	+108	+118	+149	+124	+149	+111	+ 58	+ 56	+ 81	+ 99	+129	+191	+114
16 2	+ 74	+105	+128	+100	+116	+ 82	+ 55	+ 46	+ 59	+ 81	+ 77	+121	+ 87
17 2	+ 32	+ 67	+ 96	+ 58	+ 69	+ 52	+ 45	+ 25	+ 46	+ 50	+ 17	+ 55	+ 51
18 2	− 12	+ 23	+ 41	− 2	+ 12	+ 1	+ 29	+ 8	+ 24	+ 22	− 11	− 5	+ 11
19 2	− 26	+ 2	+ 4	− 19	− 27	− 25	+ 10	− 2	+ 12	+ 8	− 37	− 22	− 10
20 2	− 26	− 17	− 21	− 38	− 47	− 37	0	− 12	− 2	− 4	− 42	− 40	− 24
21 2	− 32	− 29	− 38	− 48	− 55	− 46	− 17	− 12	− 8	− 12	− 55	− 54	− 34
22 2	− 39	− 40	− 57	− 61	− 69	− 51	− 25	− 22	− 20	− 25	− 59	− 67	− 45
23 2	− 44	− 56	− 60	− 72	− 73	− 56	− 26	− 12	− 25	− 32	− 54	− 59	− 47
Range.	255	238	280	233	262	189	99	94	136	186	285	311	210

Rainfall, 1915.

TABLE Va.—*Total fall of rain (in inches) as measured by F. Chambers's self-registering gauge, the funnel of which is 28 feet above the ground.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	..	..	..	..	..	..	0·33	0·31	0·16	..	..	..
2	..	..	0·07	..	..	..	0·02	0·01	0·07	0·05	..	..
3	..	..	**0·54**	..	..	..	0·01	0·36	0·04	0·09	..	..
4	..	**0·25**	..	..	..	..	..	0·60	..	0·12	..	..
5	..	..	..	..	..	..	..	0·48	..	0·72	..	..
6	..	..	..	..	..	..	0·08	0·21	0·49	**0·80**	..	..
7	..	..	..	..	..	..	..	0·17	0·02	0·21	..	..
8	..	..	..	..	..	..	..	0·09	0·94	0·09	..	..
9	..	..	..	..	..	..	0·10	0·01	**4·10**	..	**0·01**	..
10	..	..	..	..	..	..	0·21	..	0·01	..	..	..
11	..	..	..	..	..	..	0·12	..	..	..	..	..
12	..	..	0·04	..	..	..	0·34	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	0·25	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	0·98	0·01	..	..	..	..
16	..	..	..	..	0·09	0·02	1·07	0·01	..	..	..	..
17	..	..	..	0·01	0·02	..	0·09	0·06	..	..	..	..
18	..	..	..	..	0·01	2·20	0·07	..	..	..	..	..
19	..	..	..	..	..	0·03	0·28	0·09	..	..	..	..
20	..	..	..	..	**0·19**	0·80	0·10	0·75	..	..	..	..
21	..	..	..	..	..	0·47	0·04	0·92	0·11	..	..	..
22	..	..	..	..	..	..	0·06	0·08	..	..	..	..
23	..	..	..	..	..	0·20	0·89	1·10	..	..	..	..
24	..	..	..	..	..	2·49	0·54	0·17	..	..	..	..
25	..	..	..	..	..	**11·12**	0·17	**2·23**	0·88	..	..	..
26	..	..	..	..	..	10·22	0·66	0·01	..	..	..	**0·05**
27	..	..	..	..	..	1·94	2·13	0·01	1·32	..	..	..
28	..	..	..	..	..	6·48	**4·14**	..	1·76	..	..	..
29	..	..	..	**0·04**	..	2·56	0·05	0·12	0·05	..	..	..
30	..	..	..	..	..	0·46	1·17	0·13	..	..	..	..
31	..	..	..	..	..		0·12	0·74		..		..
Monthly Total.	..	0·25	0·65	0·05	0·31	**38·99**	13·77	8·67	9·95	2·33	0·01	0·05
Number of rainy days.	..	1	3	2	4	13	25	24	13	8	1	1

Total fall of rain in the year .. 75·03 Ins.
Total number of rainy days in the year .. 95
The greatest daily fall of rain in the year (that of 25th June) was .. 11·12
No rain fell in the month of January nor on any of the days left blank in the above table.

TABLE Vb.—*Total fall of rain (in inches) as measured by Newman's gauge, placed 4½ feet above the ground.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	..	..	..	..	..	..	0·34	0·31	0·15	..	..	..
2	..	..	0·08	..	..	..	0·02	0·01	0·08	0·07	..	..
3	..	..	**0·56**	..	..	..	0·01	0·39	0·05	0·11	..	..
4	..	**0·30**	..	..	..	..	0·01	0·65	..	0·13	..	..
5	..	..	..	..	..	..	..	0·52	..	0·72	..	..
6	..	..	..	..	..	..	0·09	0·19	0·51	**0·94**	..	..
7	..	..	..	..	..	..	..	0·20	0·02	0·21	**0·01**	..
8	..	..	..	..	..	..	..	0·10	1·01	0·09	..	..
9	..	..	..	..	..	..	0·11	0·01	**4·13**	..	0·01	..
10	..	..	..	..	..	..	0·24	..	0·01	..	..	..
11	..	..	..	..	..	..	0·14	..	0·01	..	..	..
12	..	..	0·05	..	..	..	0·35	..	..	..	..	..
13	..	..	..	..	..	..	..	0·01	..	0·27	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	1·06	0·01	..	..	..	..
16	..	..	..	..	0·12	0·02	1·12	0·01	..	0·01	..	..
17	..	..	..	0·02	0·03	..	0·10	0·06	..	..	..	..
18	..	..	..	..	0·01	2·31	0·07	..	..	..	..	..
19	..	..	..	..	..	0·03	0·29	0·09	..	..	..	..
20	..	..	..	..	**0·20**	0·93	0·12	0·76	..	..	..	..
21	..	..	..	..	..	0·49	0·05	0·93	0·13	..	..	..
22	..	..	..	..	..	..	0·07	0·08	..	..	..	..
23	..	..	..	..	..	0·23	0·96	1·12	..	..	..	..
24	..	..	..	..	..	2·57	0·54	0·17	..	..	..	..
25	..	..	..	..	..	**11·41**	0·19	**2·27**	0·91	..	..	..
26	..	..	..	..	..	10·32	0·68	0·01	..	..	..	0·07
27	..	..	..	..	..	2·08	2·23	0·01	1·36	..	..	..
28	..	..	..	..	..	6·61	**4·22**	..	1·78	..	..	..
29	..	..	..	**0·04**	..	2·61	0·07	0·13	0·06	..	..	..
30	..	..	..	..	..	0·49	1·21	0·14	..	..	..	..
31	..	..	..	..	..		0·10	0·75		..		..
Monthly Total.	..	0·30	0·69	0·06	0·36	**40·10**	14·39	8·93	10·21	2·55	0·02	0·07
Number of rainy days.	..	1	3	2	4	13	26	25	14	9	2	1

Total fall of rain in the year .. 77·68 Ins.
Total number of rainy days in the year .. 100
The greatest daily fall of rain in the year (that of 25th June) was .. 11·41
No rain fell in the month of January nor on any of the days left blank in the above table.

Velocity of Wind, 1915.

Robinson Beckley's Anemograph.

Table VIa.—*Mean Velocity of the Wind in miles per hour, without regard to the Direction from which it blew for each day of Bombay Civil Time; also the Mean Monthly Velocity and its variation from the Mean of the year.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	4·8	4·9	2·8	5·3	4·6	6·1	8·9	12·4	7·1	7·9	5·5	7·0
2 ..	6·2	4·6	5·1	6·6	4·3	7·3	10·3	9·7	6·7	5·4	6·0	7·5
3 ..	7·0	5·3	6·4	8·5	5·0	8·2	8·2	13·5	9·1	4·3	6·8	7·8
4 ..	5·8	7·9	5·1	8·9	5·2	6·7	8·1	15·5	10·5	5·6	6·2	7·3
5 ..	5·8	7·2	5·8	9·5	5·9	5·3	6·1	15·4	8·6	5·3	7·8	5·4
6 ..	5·3	6·2	6·0	9·1	5·3	4·4	5·8	11·9	5·9	13·4	6·8	5·3
7 ..	8·9	3·8	3·7	9·7	6·5	5·1	6·3	12·2	8·6	7·3	4·6	5·1
8 ..	10·3	3·7	5·2	8·7	6·0	4·4	6·1	13·4	11·9	7·0	3·7	4·0
9 ..	6·4	5·6	7·2	5·9	6·5	5·1	5·4	9·6	7·0	4·0	4·3	5·5
10 ..	7·4	8·1	4·8	6·6	5·9	5·6	6·5	9·2	7·1	4·5	4·1	6·7
11 ..	6·6	8·0	5·1	8·7	4·9	5·9	10·2	10·4	6·0	3·4	5·9	5·3
12 ..	6·7	5·6	4·6	10·9	4·0	5·9	6·4	6·7	5·4	5·0	3·4	5·1
13 ..	4·4	5·5	8·1	12·3	4·3	6·4	4·8	7·5	5·3	5·1	5·9	6·2
14 ..	4·7	3·9	8·3	3·8	4·9	6·2	5·9	7·0	4·2	4·4	5·4	5·3
15 ..	7·8	7·9	7·4	4·8	5·0	6·6	5·8	7·1	6·2	6·4	5·0	5·4
16 ..	8·9	11·0	4·8	4·4	6·6	6·7	6·1	7·8	6·4	4·8	6·6	5·6
17 ..	5·8	9·3	5·2	6·8	7·9	7·5	6·8	7·1	5·1	5·6	5·4	7·1
18 ..	4·2	8·0	5·3	7·0	7·0	5·6	7·5	7·6	4·9	5·5	5·7	6·2
19 ..	4·3	8·1	5·9	9·2	7·0	6·5	5·6	5·9	6·5	5·3	4·7	7·6
20 .	4·9	9·3	5·6	7·8	6·9	11·7	6·5	5·3	6·0	6·5	5·2	7·8
21 ..	5·7	7·2	4·1	4·2	7·1	16·2	8·0	6·6	3·4	5·3	4·7	7·9
22 ..	4·3	3·7	6·0	5·3	5·4	15·7	3·2	3·7	3·6	5·5	5·5	7·4
23 ..	4·8	3·8	3·9	7·0	4·3	7·5	8·0	5·3	5·1	4·9	4·9	4·4
24 ..	7·8	3·7	3·8	7·3	5·4	6·7	10·7	9·2	5·6	2·4	5·0	5·1
25 ..	9·2	4·3	4·5	5·8	9·5	10·9	10·9	7·3	5·7	4·4	4·3	3·8
26 ..	7·1	5·5	5·7	5·5	7·3	11·9	10·8	8·9	3·1	6·4	3·8	3·3
27 ..	8·1	6·0	7·7	6·6	6·5	9·7	13·2	8·2	3·6	7·3	4·8	5·9
28 ..	9·5	4·3	4·0	6·8	6·5	8·0	12·5	6·2	4·3	5·3	4·4	6·9
29 ..	8·2		4·5	8·1	6·0	9·3	13·6	5·7	9·9	5·6	4·0	6·6
30 ..	7·3		5·7	5·6	5·6	10·5	16·9	6·7	8·6	5·9	5·1	5·9
31 ..	4·9		6·1		6·2		13·3	8·4		5·4		4·8
Monthly Mean.	6·6	6·2	5·4	7·2	5·9	7·8	8·3	8·8	6·4	5·6	5·2	6·0
Annual Variation.	0·0	− 0·4	− 1·2	+ 0·6	− 0·7	+ 1·2	+ 1·7	+ 2·2	− 0·2	− 1·0	− 1·4	− 0·6

Table VIb.—*Showing the Mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year* 1915, *and for the whole year.*

1915. Bombay Civil Time Hourly Intervals	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1	− 1·8	− 2·0	− 1·8	+ 0·1	− 1·0	+ 0·4	− 0·1	− 0·2	− 1·3	− 0·6	− 1·8	− 1·9	− 1·0
1 „ 2	− 2·1	− 1·0	− 1·7	− 1·0	− 1·3	− 0·1	− 0·1	+ 0·2	− 1·3	− 0·9	− 1·2	− 1·6	− 1·0
2 „ 3	− 2·1	− 1·4	− 1·5	− 1·6	− 1·2	− 0·4	+ 0·4	+ 0·1	− 1·5	− 0·9	− 1·3	− 1·1	− 1·0
3 „ 4	− 1·6	− 1·5	− 1·6	− 2·0	− 1·4	− 1·5	+ 0·2	+ 0·1	− 1·2	− 0·3	− 1·0	− 0·4	− 1·0
4 „ 5	− 1·2	− 1·1	− 1·2	− 2·2	− 1·2	− 1·9	+ 0·1	− 0·3	− 1·0	− 0·1	− 0·5	+ 0·1	− 0·9
5 „ 6	− 1·0	− 1·0	− 1·3	− 2·9	− 1·2	− 1·9	− 0·7	0·0	− 1·1	+ 0·7	− 0·5	+ 0·6	− 0·9
6 „ 7	− 1·0	− 1·2	− 1·4	− 3·3	− 1·2	− 2·1	0·0	+ 0·4	− 0·7	+ 0·7	+ 0·1	+ 0·7	− 0·7
7 „ 8	− 1·1	− 1·1	− 0·7	− 3·0	− 1·0	− 1·6	− 0·3	− 0·3	− 0·5	+ 0·6	+ 0·4	+ 0·5	− 0·7
8 „ 9	− 0·6	− 1·0	+ 0·1	− 2·3	− 0·7	− 1·5	− 0·3	+ 0·2	− 0·5	+ 0·6	+ 0·3	+ 1·0	− 0·4
9 „ 10	− 0·8	− 1·1	− 0·6	− 1·8	− 0·1	− 0·2	− 0·3	− 0·8	− 0·6	− 0·4	− 0·4	+ 0·4	− 0·6
10 „ 11	− 1·2	− 1·0	− 0·8	− 0·3	+ 0·1	− 0·3	− 0·8	− 0·7	− 0·4	− 0·8	− 1·6	− 0·3	− 0·7
11 „ 12	− 1·7	0·0	+ 0·3	+ 0·8	+ 0·6	+ 0·7	+ 0·1	+ 0·2	+ 0·3	− 0·1	− 2·1	− 1·5	− 0·2
12 „ 13	− 0·9	+ 1·2	+ 1·2	+ 1·7	+ 1·5	+ 1·7	+ 0·2	+ 1·0	+ 0·9	+ 0·2	− 0·8	− 1·3	+ 0·5
13 „ 14	+ 0·7	+ 2·0	+ 2·3	+ 3·0	+ 2·1	+ 1·8	+ 0·5	+ 0·8	+ 1·8	+ 0·8	+ 0·4	− 0·5	+ 1·3
14 „ 15	+ 2·1	+ 2·5	+ 2·9	+ 3·6	+ 2·3	+ 1·5	+ 0·3	+ 0·7	+ 2·3	+ 1·4	+ 1·8	+ 0·4	+ 1·8
15 „ 16	+ 2·9	+ 2·7	+ 3·4	+ 3·8	+ 2·4	+ 1·5	+ 0·4	+ 0·9	+ 2·9	+ 1·2	+ 2·4	+ 1·4	+ 2·2
16 „ 17	+ 3·5	+ 2·9	+ 3·3	+ 3·4	+ 2·3	+ 1·6	+ 1·3	+ 0·3	+ 2·3	+ 0·7	+ 2·4	+ 1·8	+ 2·1
17 „ 18	+ 3·4	+ 2·3	+ 2·5	+ 2·5	+ 1·8	+ 1·2	+ 0·7	+ 0·4	+ 1·7	+ 0·4	+ 2·3	+ 1·9	+ 1·8
18 „ 19	+ 3·5	+ 2·1	+ 1·5	+ 1·5	+ 0·9	+ 0·5	+ 0·1	− 0·4	+ 0·5	+ 0·4	+ 2·5	+ 1·8	+ 1·2
19 „ 20	+ 3·3	+ 1·5	+ 0·1	+ 0·4	− 0·1	− 0·1	− 0·1	− 0·4	+ 0·3	+ 0·1	+ 1·8	+ 1·6	+ 0·7
20 „ 21	+ 2·1	+ 0·4	− 0·7	− 0·4	− 0·7	+ 0·5	0·0	− 0·2	− 0·1	− 0·5	+ 0·8	+ 0·6	+ 0·1
21 „ 22	− 0·2	− 0·6	− 1·2	− 0·3	− 1·2	+ 0·3	− 0·9	− 0·1	− 0·4	− 1·0	− 0·7	− 1·2	− 0·6
22 „ 23	− 1·5	− 1·4	− 1·4	− 0·3	− 1·1	+ 0·3	− 0·7	− 0·4	− 0·9	− 1·2	− 1·5	− 1·8	− 1·0
23 „ 24	− 2·2	− 1·8	− 1·8	− 0·1	− 1·0	0·0	− 0·1	− 0·3	− 1·2	− 1·3	− 1·8	− 2·1	− 1·1
Range.	5·7	4·9	5·2	7·1	3·8	3·9	2·2	1·8	4·4	2·7	4·6	4·0	3·3

	Miles.
The mean velocity for June to August ..	8·3
The mean velocity for September to May ..	6·1
The mean velocity for the year ..	6·6

Mean Daily Velocities of the North and East Components of the Wind, 1915.

Table VIc.—*Showing the Mean Velocities of the North or South and East or West Components of the Winds which blew on each day of the year* 1915.

In Miles per Hour.

1915.	Month.																							
	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
Date.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.	N. or S.	E. or W.
1 ..	1·6 N	1·4 E	1·6 S	1·5 E	0·5 N	0·5 W	2·2 N	3·6 W	0·2 N	4·2 W	0·1 N	6·1 W	2·1 S	8·5 W	4·3 S	11·6 W	2·5 S	6·6 W	7·4 S	1·9 E	2·9 N	0·7 E	2·9 N	1·7 E
2 ..	4·1 N	1·0 E	1·9 S	0·6 E	0·1 S	1·8 E	2·9 N	5·2 W	0·7 S	3·7 W	2·7 N	6·7 W	4·0 S	9·5 W	3·8 S	8·9 W	2·2 S	6·2 W	4·0 S	0·8 E	3·2 N	1·1 E	2·3 N	3·6 E
3 ..	5·8 N	1·6 W	2·9 N	3·5 W	2·4 S	2·8 E	5·1 N	5·8 W	1·0 S	3·9 W	4·0 N	6·9 W	3·2 S	7·5 W	1·6 S	13·2 W	1·1 S	8·8 W	1·7 S	2·9 W	2·3 N	2·9 E	2·9 N	3·3 E
4 ..	4·1 N	1·8 W	0·7 N	2·2 E	0·7 S	0·9 W	6·0 N	5·6 W	1·7 S	4·0 W	2·3 N	6·2 W	3·7 S	7·0 W	1·9 S	15·1 W	0·1 S	10·5 W	2·5 S	4·9 W	3·7 N	0·5 E	3·0 N	2·8 E
5 ..	4·9 N	1·6 W	4·1 N	0·2 W	3·5 N	2·6 W	5·8 N	5·6 W	3·1 S	3·2 W	1·2 N	5·1 W	2·6 S	5·4 W	0·1 S	15·2 W	2·3 N	8·1 W	4·6 S	0·7 W	4·2 N	0·4 E	3·3 N	1·3 E
6 ..	3·8 N	1·1 W	3·7 N	0·6 E	4·2 N	3·4 W	6·6 N	5·1 W	4·0 S	3·1 W	1·3 S	3·5 W	2·8 S	5·0 W	0·1 S	11·9 W	2·8 N	3·5 W	12·8 S	3·1 E	5·4 N	1·5 W	3·4 N	0·7 W
7 ..	7·5 N	1·0 W	1·9 N	1·2 W	0·1 S	2·8 W	7·1 N	5·9 W	1·8 S	6·1 W	0·5 N	5·0 W	2·3 S	5·9 W	0·7 S	12·1 W	5·0 N	6·5 W	5·6 S	4·5 W	2·3 N	0·1 W	2·5 N	1·3 E
8 ..	9·0 N	2·1 W	0·3 S	1·0 W	0·6 S	2·3 W	6·6 N	4·0 W	2·2 S	5·6 W	1·2 S	4·0 W	2·6 S	5·5 W	2·7 S	12·9 W	5·9 N	9·9 W	0·5 S	6·7 W	2·6 S	0·1 E	1·2 N	1·2 E
9 ..	4·9 N	0·1 W	0·4 S	0·0	5·3 N	3·1 W	3·9 N	2·9 W	2·4 S	5·9 W	0·4 N	5·0 W	2·5 S	4·7 W	4·1 S	8·6 W	1·5 N	4·9 W	0·7 N	3·8 W	0·1 N	1·0 W	2·9 N	0·8 E
10 ..	4·2 N	2·8 E	6·1 N	2·8 W	1·0 N	1·5 W	3·1 N	3·6 W	2·6 S	5·1 W	0·3 N	5·5 W	5·9 S	0·9 W	3·5 S	8·5 W	0·0	7·1 W	0·7 S	0·3 W	1·2 N	0·9 W	3·2 N	0·3 E
11 ..	3·4 N	1·4 E	6·8 N	2·8 W	0·8 S	1·0 W	5·4 N	4·0 W	1·9 S	4·5 W	1·4 N	5·6 W	9·7 S	2·6 E	3·4 S	9·7 W	0·4 S	5·9 W	1·0 N	0·0	2·9 N	1·2 E	3·2 N	1·1 W
12 ..	3·9 N	1·8 E	4·0 N	1·5 W	1·0 S	0·7 E	8·2 N	5·3 W	1·9 S	3·4 W	1·2 N	5·5 W	5·1 S	0·4 W	2·7 S	6·1 W	0·4 N	5·4 W	3·4 S	1·2 W	0·4 N	0·0	3·0 N	1·2 W
13 ..	1·4 N	0·2 E	3·7 N	1·3 W	5·4 N	5·1 W	10·0 N	6·5 W	3·2 S	1·2 W	0·2 N	5·6 W	1·1 S	4·4 W	2·9 S	7·0 W	1·0 N	5·1 W	2·2 S	4·4 W	3·1 N	1·2 E	4·2 N	2·3 W
14 ..	2·9 N	0·3 W	2·5 N	1·8 W	6·6 N	2·9 W	2·4 N	0·9 W	3·7 S	2·1 W	1·0 S	5·6 W	1·2 N	5·6 W	2·7 S	6·5 W	2·3 N	3·2 W	3·3 S	0·1 E	3·2 N	0·3 W	3·2 N	1·2 W
15 ..	7·0 N	1·8 W	6·4 N	3·7 W	5·4 N	4·0 W	0·1 S	1·4 W	3·0 S	3·7 W	0·7 S	6·4 W	3·3 N	3·7 W	2·9 S	6·5 W	4·3 N	1·9 W	4·1 S	2·5 E	2·3 N	0·1 W	3·4 N	0·7 W
16 ..	7·4 N	4·0 W	9·2 N	5·5 W	2·5 N	3·2 W	0·8 N	2·0 W	3·8 S	5·1 W	0·2 S	6·6 W	4·5 N	1·8 W	2·9 S	7·1 W	4·6 N	2·9 W	2·0 S	0·0	2·7 N	1·9 E	3·7 N	0·7 W
17 ..	4·5 N	1·3 W	7·8 N	4·2 W	0·5 N	2·0 W	0·2 N	3·3 W	2·6 S	7·3 W	3·1 N	6·7 W	4·3 S	2·1 W	1·4 S	6·7 W	3·2 N	2·4 W	1·5 N	3·7 W	3·3 N	0·9 W	2·9 N	1·5 E
18 ..	2·3 N	0·4 W	6·4 N	4·1 W	1·5 N	2·7 W	5·6 N	3·9 W	3·6 S	5·9 W	0·4 N	2·3 W	5·1 S	0·4 E	0 1 N	7·5 W	3·3 N	1·8 W	2·5 N	1·9 W	3·9 N	0·5 W	1·2 N	1·8 E
19 ..	1·5 N	0·1 E	6·5 N	4·0 W	3·6 N	1·7 W	7·6 N	3·7 W	2·8 S	6·5 W	4·2 S	2·7 E	2·0 N	1·8 W	0·1 S	5·8 W	5·0 N	2·1 W	2·6 N	1·9 W	2·9 N	0·5 W	4·0 N	2·6 E
20 ..	2·6 N	0·5 W	7·8 N	3·4 W	3·8 N	3·2 W	2·1 S	2·6 W	2·0 S	6·5 W	6·3 S	8·1 E	4·0 N	3·4 W	1·1 S	0·6 W	4·0 N	3·5 W	4·0 N	1·3 W	3·0 N	0·2 W	3·8 N	5·0 E
21 ..	4·0 N	0·3 W	4·8 N	0·4 E	2·3 N	1·7 W	1·7 S	2·6 W	1·4 S	6·8 W	13·0 S	6·9 E	4·6 N	1·8 W	0·7 S	1·4 W	2·1 N	0·7 E	4·0 N	1·5 W	2·3 N	0·3 W	1·8 N	2·6 E
22 ..	2·9 N	0·7 W	0·4 S	1·5 W	3·4 N	2·6 W	1·6 S	4·2 W	1·3 S	5·2 W	12·5 S	5·9 E	0·1 S	0·4 E	1·4 S	2·2 W	1·0 N	1·6 W	2·9 N	1·6 W	2·9 N	1·0 E	1·0 N	3·2 E
23 ..	2·8 N	1·3 W	1·1 N	1·6 W	2·6 S	1·8 W	2·6 S	3·8 W	1·3 S	4·0 W	6·2 S	0·0	5·4 S	4·3 W	0·1 S	3·2 W	3·2 N	1·5 W	3·5 N	2·1 W	3·6 N	0·2 W	1·1 N	0·4 E
24 ..	6·1 N	3·8 W	0·5 S	1·4 W	0·4 S	2·1 W	4·0 N	5·5 W	1·5 N	4·9 W	2·8 S	4·2 W	3·0 S	9·9 W	0·1 N	9·2 W	4·1 N	1·3 W	0·9 S	0·7 W	3·2 N	0·2 E	1·0 N	0·4 E
25 ..	7·8 N	4·4 W	0·9 S	0·4 W	0·2 N	2·9 W	1·9 N	3·1 W	4·5 N	8·1 W	0·7 N	9·4 W	4·2 S	10·1 W	0·1 S	4·5 W	3·1 N	0·2 E	0·3 S	1·7 W	2·3 N	1·4 W	1·6 N	0·4 E
26 ..	5·6 N	3·0 W	0·4 S	0·8 W	2·4 N	4·7 W	2·3 N	4·6 W	1·2 N	6·8 W	0·5 S	10·5 W	4·2 S	10·0 W	1·0 N	8·6 W	0·6 S	0·1 E	3·7 N	3·2 W	1·0 N	0·9 W	1·7 N	0·7 E
27 ..	6·5 N	3·2 W	2·8 N	3·2 W	4·5 N	5·0 W	3·4 N	5·1 W	1·7 N	6·0 W	5·9 S	2·1 E	2·7 S	12·7 W	0·1 N	8·1 W	1·2 S	0·9 W	5·9 N	3·3 W	3·0 N	2·1 W	3·5 N	1·0 E
28 ..	8·1 N	3·4 W	1·6 N	3·0 W	0·3 S	3·0 W	3·5 N	4·8 W	2·1 N	6·1 W	5·4 S	5·0 W	1·5 S	12·1 W	0·2 S	6·1 W	0·7 S	1·2 W	3·9 N	1·8 W	2·1 N	1·1 W	2·2 N	2·6 E
29 ..	6·3 N	1·1 W			0·1 N	3·4 W	1·0 N	4·7 W	0·9 N	5·8 W	4·3 S	7·8 W	0·0	13·6 W	1·7 S	5·2 W	6·4 S	5·1 E	1·8 N	1·0 E	1·9 N	1·2 W	5·4 N	2·1 W
30 ..	3·9 N	0·8 E			1·5 N	3·9 W	2·3 N	2·5 W	0·5 S	5·4 W	3·4 S	9·7 W	0·0	16·9 W	2·4 S	6·1 W	7·8 S	2·9 E	1·9 N	2·1 E	2·3 N	0·9 W	4·6 N	1·5 W
31 ..	3·2 S	0·1 E			3·3 N	3·6 W			1·2 S	5·9 W			3·0 S	12·8 W	2·9 S	7·7 W			2·5 N	0·1 W			3·4 N	1·2 W
Monthly Mean.	1·2 N	0·9 W	3·0 N	1·7 W	1·7 N	2·2 W	3·3 N	4·1 W	1·3 S	5·0 W	1·7 S	4·0 W	1·9 S	5·9 W	1·6 S	7·9 W	1·2 N	3·5 W	0·5 S	1·4 W	2·5 N	0·1 W	2·8 N	0·8 E
Annual Variation.	0·5 N	2·1 E	2·3 N	1·3 E	1·0 N	0·8 E	2·6 N	1·1 W	2·0 S	2·0 W	2·4 S	1·0 W	2·6 S	2·9 W	2·3 S	4·9 W	0·5 N	0·5 W	1·2 S	1·6 E	1·8 N	2·9 E	2·1 N	3·8 E

The Velocities of the Mean Components for the year are 0·7 N and 3·0 W.

TABLE VId.—*Showing the Mean diurnal inequality of the Velocity of the North or South and East or West Components of the Wind for each month of the year 1915 and for the whole year.*

In miles per hour.

1915. Bombay Civil Time Hourly Intervals.	January. N. or S.	January. E. or W.	February. N. or S.	February. E. or W.	March. N. or S.	March. E. or W.	April. N. or S.	April. E. or W.	May. N. or S.	May. E. or W.	June. N. or S.	June. E. or W.	July. N. or S.	July. E. or W.	August. N. or S.	August. E. or W.	September. N. or S.	September. E. or W.	October. N. or S.	October. E. or W.	November. N. or S.	November. E. or W.	December. N. or S.	December. E. or W.	Year. N. or S.	Year. E. or W.
0 to 1 ..	1·4 S	1·8 E	1·3 S	2·0 E	0·4 S	2·1 E	0·3 N	0·8 E	0·3 N	0·7 E	0·1 S	1·0 E	0·5 S	0·4 E	0·4 S	0·1 W	0·6 S	0·5 E	0·6 S	0·9 E	0·9 S	1·5 E	0·1 S	1·4 E	0·5 S	1·1 E
1 ,, 2 ..	1·8 S	2·1 E	0·8 S	2·5 E	0·2 S	2·1 E	0·1 N	1·6 E	0·5 N	1·0 E	0·1 N	0·7 E	0·9 S	1·0 E	0·7 S	0·2 W	0·5 S	0·7 E	0·6 S	1·1 E	1·2 S	2·3 E	1·0 S	2·3 E	0·6 S	1·4 E
2 ,, 3 ..	1·2 S	2·3 E	1·1 S	2·5 E	0·4 S	1·6 E	0·5 S	2·6 E	0·6 N	0·8 E	0·4 N	1·0 E	0·7 S	0·4 E	0·0	0·5 W	0·6 S	0·7 E	0·4 S	1·4 E	1·0 S	2·3 E	0·9 S	3·0 E	0·5 S	1·5 E
3 ,, 4 ..	1·2 S	2·3 E	1·0 S	3·1 E	0·2 N	1·7 E	0·7 S	3·2 E	0·3 N	1·4 E	0·7 N	1·3 E	0·4 S	0·4 E	0·6 N	0·7 W	0·5 S	0·4 E	1·0 S	1·9 E	0·8 S	2·9 E	1·0 S	3·8 E	0·4 S	1·8 E
4 ,, 5 ..	0·6 S	2·6 E	0·7 S	3·4 E	0·1 S	2·7 E	0·7 S	3·9 E	0·1 S	1·5 E	1·0 N	0·9 E	0·1 S	0·7 E	0·1 N	0·2 E	0·2 S	1·8 E	0·5 S	2·1 E	0·6 S	3·6 E	0·6 S	4·4 E	0·3 S	2·3 E
5 ,, 6 ..	0·7 S	3·4 E	1·2 S	4·3 E	0·4 S	3·2 E	0·5 S	4·6 E	0·4 S	1·9 E	1·2 N	2·4 E	0·4 S	1·0 E	0·1 S	0·4 E	0·5 S	1·9 E	1·3 S	2·9 E	0·4 S	3·7 E	0·5 S	4·8 E	0·4 S	2·8 E
6 ,, 7 ..	0·8 S	3·7 E	1·1 S	4·3 E	1·0 S	4·3 E	0·7 S	4·8 E	0·6 S	2·2 E	1·1 N	2·8 E	0·4 S	1·3 E	0·1 S	0·3 E	0·4 S	2·6 E	1·7 S	4·2 E	0·4 S	4·2 E	1·1 S	4·8 E	0·6 S	3·3 E
7 ,, 8 ..	1·4 S	3·7 E	1·4 S	4·7 E	1·5 S	5·6 E	0·7 S	4·5 E	0·1 S	1·8 E	1·2 N	3·2 E	0·4 S	1·6 E	0·1 N	0·9 E	0·6 S	3·0 E	1·7 S	3·9 E	0·7 S	4·8 E	1·5 S	4·8 E	0·7 S	3·5 E
8 ,, 9 ..	1·5 S	4·5 E	1·2 S	4·7 E	1·4 S	5·9 E	0·5 S	4·3 E	0·3 S	1·4 E	1·2 N	2·9 E	0·6 S	1·5 E	0·1 S	1·0 E	0·7 S	3·4 E	1·4 S	3·8 E	0·9 S	4·7 E	1·4 S	5·6 E	0·7 S	3·6 E
9 ,, 10 ..	1·5 S	4·3 E	1·4 S	3·4 E	1·4 S	4·5 E	1·0 S	3·1 E	0·4 S	0·7 E	0·5 N	1·8 E	0·5 S	1·2 E	0·2 N	1·3 E	0·9 S	2·1 E	1·5 S	2·5 E	1·3 S	4·2 E	1·9 S	5·1 E	0·9 S	2·8 E
10 ,, 11 ..	2·0 S	2·8 E	1·6 S	2·0 E	0·9 S	1·0 E	0·4 S	0·3 W	0·4 S	0·1 W	0·4 S	1·3 E	0·1 N	1·1 E	0·4 S	1·0 E	0·7 S	0·6 E	1·1 S	1·2 E	1·7 S	3·2 E	2·0 S	3·7 E	1·0 S	1·5 E
11 ,, 12 ..	2·8 S	1·0 E	0·4 S	2·0 W	0·7 S	2·0 W	0·1 S	2·6 W	0·5 S	0·7 W	0·3 S	0·3 W	0·4 S	0·1 W	0·4 S	0·0	0·2 S	1·2 W	0·7 S	1·0 W	1·5 S	0·5 E	1·8 S	0·7 E	0·8 S	0·6 W
12 ,, 13 ..	1·6 S	1·8 W	0·1 N	3·4 W	0·5 S	3·3 W	0·1 S	3·6 W	0·6 S	1·6 W	1·2 S	1·8 W	0·0	0·2 W	0·4 S	1·0 W	0·6 N	1·8 W	0·3 S	1·8 W	1·0 S	2·2 W	1·1 S	0·7 W	0·5 S	1·9 W
13 ,, 14 ..	1·2 S	4·5 W	0·2 N	4·8 W	0·1 S	4·3 W	0·4 N	4·8 W	0·5 S	2·3 W	1·3 S	2·1 W	0·1 N	1·2 W	0·2 S	0·7 W	1·2 N	3·1 W	0·1 N	2·8 W	0·6 S	4·3 W	0·5 S	3·4 W	0·2 S	3·2 W
14 ,, 15 ..	0·1 N	5·9 W	0·9 N	5·3 W	0·2 N	5·1 W	1·0 N	5·4 W	0·4 S	2·5 W	0·9 S	2·3 W	0·4 N	1·5 W	0·2 N	0·9 W	1·1 N	3·4 W	0·5 N	3·7 W	0·1 S	6·4 W	0·1 N	6·0 W	0·3 N	4·0 W
15 ,, 16 ..	1·7 N	5·7 W	0·7 N	5·5 W	1·1 N	5·4 W	1·4 N	5·4 W	0·1 S	2·7 W	0·6 S	3·2 W	0·4 N	1·6 W	0·6 N	1·0 W	1·6 N	4·0 W	1·0 N	3·7 W	1·1 N	6·3 W	0·7 N	6·9 W	0·8 N	4·3 W
16 ,, 17 ..	2·6 N	5·5 W	1·5 N	5·4 W	1·2 N	5·4 W	1·5 N	5·0 W	0·2 N	2·7 W	0·1 S	2·8 W	1·0 N	2·3 W	0·0	0·6 W	1·1 N	3·4 W	1·3 N	3·4 W	1·8 N	5·9 W	1·2 N	7·2 W	1·1 N	4·1 W
17 ,, 18 ..	3·2 N	4·8 W	1·7 N	4·8 W	1·8 N	4·3 W	1·6 N	3·8 W	0·4 N	2·3 W	0·3 S	2·6 W	1·1 N	1·9 W	0·2 N	0·3 E	1·2 N	2·1 W	1·6 N	2·9 W	2·4 N	5·3 W	2·3 N	6·0 W	1·4 N	3·4 W
18 ,, 19 ..	3·9 N	4·1 W	2·2 N	3·7 W	1·5 N	3·3 W	1·2 N	2·7 W	0·2 N	1·3 W	0·3 S	2·0 W	1·0 N	1·2 W	0·4 N	0·2 W	0·9 N	1·3 W	2·1 N	2·6 W	3·3 N	3·7 W	3·1 N	5·2 W	1·6 N	2·6 W
19 ,, 20 ..	4·2 N	3·3 W	2·4 N	2·6 W	1·1 N	2·1 W	1·0 N	1·1 W	0·3 N	0·3 W	0·1 S	1·5 W	0·8 N	1·0 W	0·2 N	0·1 W	0·8 N	0·5 W	1·8 N	2·0 W	3·0 N	3·2 W	3·4 N	4·6 W	1·6 N	1·9 W
20 ,, 21 ..	3·3 N	2·0 W	2·1 N	0·7 W	1·1 N	0·7 W	0·4 N	0·1 W	0·5 N	0·1 E	0·4 S	0·5 W	0·2 N	0·4 W	0·3 S	0·0	0·3 S	0·2 E	1·5 N	1·2 W	2·0 N	1·8 W	3·1 N	3·1 W	1·1 N	0·8 W
21 ,, 22 ..	1·3 N	0·3 E	1·5 N	0·1 E	0·7 N	0·1 W	0·5 S	0·2 E	0·3 N	0·8 E	0·5 S	0·8 W	0·3 N	0·1 E	0·0	0·1 W	0·9 S	1·0 E	1·3 N	0·8 W	0·8 N	0·3 W	1·6 N	1·2 W	0·5 N	0·1 W
22 ,, 23 ..	0·4 S	1·5 E	0·3 N	0·3 E	0·4 N	0·4 E	0·8 S	0·4 E	0·1 S	0·8 E	0·4 S	0·0	0·2 N	0·5 E	0·1 N	0·1 E	1·0 S	0·8 E	0·9 N	0·3 W	0·3 S	0·4 E	0·7 N	0·0	0·0	0·4 E
23 ,, 24 ..	1·5 S	1·5 E	0·1 N	0·8 E	0·1 N	1·0 E	0·8 S	0·6 E	0·1 N	0·7 E	0·4 S	0·5 E	0·1 N	0·2 E	0·5 S	0·4 E	0·7 S	1·0 E	0·6 N	0·7 E	0·5 S	0·7 E	0·0	0·7 E	0·3 S	0·7 E

Aggregate and Mean Velocities and Relative Frequency of Different Winds, 1915.

Table VIe.—*Showing for the year 1915 the sums of the Velocities, and the Mean Velocities, in miles per hour, of the Winds which blew in each Month, from each of the sixteen Principal Directions and also the number of Hourly Observations which those sums comprise; the latter numbers indicating the Relative Frequency of the same Wind (as to direction) in the several Months, and of different Winds during the same Month.*

1915.	N.			N. N. E.			N. E.			E. N. E.			E.			E. S. E.			S. E.			S. S. E.		
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.
January ..	514	98	5·2	346	74	4·7	279	63	4·4	571	101	5·7	59	15	3·9	91	28	3·2	25	3	8·3	44	6	7·3
February ..	274	54	5·1	152	39	3·9	125	33	3·8	286	54	5·3	41	9	4·6	274	49	5·6	153	27	5·7	11	3	3·7
March ..	169	42	4·0	157	44	3·6	59	17	3·5	107	22	4·9	37	11	3·4	281	44	6·4	183	42	4·4	43	12	3·6
April ..	224	43	5·2	178	38	4·7	86	24	3·6	87	23	3·8	23	5	4·6	9	3	3·0	15	4	3·7	66	8	8·2
May ..	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	0	0	0·0	7	1	7·0	12	2	6·0	57	9	6·3
June ..	2	1	2·0	3	1	3·0	0	0	0·0	19	3	6·3	28	5	5·6	469	33	14·2	234	18	13·0	366	29	12·6
July ..	15	3	5·0	58	14	4·1	21	5	4·2	32	10	3·2	15	4	3·7	73	15	4·9	63	6	10·5	417	38	11·0
August ..	0	0	0·0	4	2	2·0	7	2	3·5	14	3	4·7	0	0	0·0	86	13	6·6	51	9	5·7	48	12	4·0
September ..	102	25	4·1	80	29	2·8	69	19	3·6	188	40	4·7	15	5	3·0	185	27	6·9	73	15	4·9	180	18	10·0
October ..	68	19	3·6	84	26	3·2	29	7	4·1	219	47	4·7	143	29	4·9	144	22	6·5	226	33	6·8	486	50	9·7
November ..	154	38	4·1	245	70	3·5	154	42	3·7	732	135	5·4	251	56	4·5	101	27	3·7	91	23	4·0	41	12	3·4
December ..	143	31	4·6	369	103	3·6	65	15	4·3	1,088	178	6·1	507	87	5·8	298	45	6·6	0	0	0·0	0	0	0·0
Year.	1,665	354	4·7	1,676	440	3·8	894	227	3·9	3,343	616	5·4	1,119	226	5·0	2,018	307	6·6	1,126	182	6·2	1,759	197	8·9

1915.	S.			S. S. W.			S. W.			W. S. W.			W.			W. N. W.			N. W.			N. N. W.			Number of Observations.	
Month.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Sum of Velocities.	Number of Observations.	Mean Velocity.	Calm.	Variable.
	Miles.		Miles.	Miles.		Miles.	Miles.		Miies.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.	Miles.		Miles.		
January ..	13	3	4·3	3	1	3·0	0	0	0·0	48	13	3·7	41	7	5·9	368	62	5·9	1,133	124	9·1	1,341	146	9·2	0	0
February ..	8	1	8·0	5	1	5·0	20	5	4·0	121	28	4·3	269	60	4·5	472	85	5·6	1,177	116	10·1	759	104	7·3	4	0
March ..	38	11	3·5	37	13	2·8	24	10	2·4	193	45	4·3	495	85	5·8	1,015	161	6·3	856	116	7·4	347	63	5·5	6	0
April ..	169	18	9·4	124	23	5·4	43	9	4·8	144	31	4·6	362	56	6·5	1,231	148	8·3	1,710	185	9·2	730	99	7·4	3	0
May ..	38	8	4·7	257	55	4·7	405	85	4·8	1,879	308	6·1	938	143	6·6	692	108	6·4	93	18	5·2	22	7	3·1	0	0
June ..	419	39	10·7	226	37	6·1	259	37	7·0	729	94	7·8	1,585	213	7·4	1,083	176	6·2	128	25	5·1	52	9	5·8	0	0
July ..	177	24	7·4	142	26	5·5	312	55	5·7	2,631	312	8·4	1,556	125	12·4	355	56	6·3	139	18	7·7	209	33	6·3	0	0
August ..	2	1	2·0	6	1	6·0	134	23	5·8	2,972	349	8·5	2,934	284	10·3	214	34	6·3	36	9	4·0	6	2	3·0	0	0
September ..	124	22	5·6	23	7	3·3	22	6	3·7	414	67	6·2	1,149	153	7·5	801	128	6·3	934	113	8·3	237	44	5·4	2	0
October ..	277	46	6·0	225	49	4·6	246	51	4·8	328	72	4·6	317	59	5·4	571	97	5·9	550	78	7·1	281	58	4·8	1	0
November ..	9	2	4·5	4	1	4·0	4	2	2·0	40	11	3·6	86	16	5·4	661	108	6·1	564	79	7·1	603	96	6·3	2	0
December ..	0	0	0·0	0	0	0·0	4	1	4·0	0	0	0·0	89	16	5·6	597	93	6·4	687	86	8·0	604	89	6·8	0	0
Year ..	1,274	175	7·3	1,052	214	4·9	1,473	284	5·2	9,499	1,330	7·1	9,821	1,217	8·1	8,060	1,256	6·4	8,007	967	8·3	5,191	750	6·9	18	0

Velocity of Wind, 1915.

Dines' Anemograph.

TABLE VI*f*.—*Mean Velocity of Wind in miles per hour for each day of Bombay Civil Time; also the Mean Monthly Velocity and its variation from the mean of the year.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1 ..	4·2	4·1	2·2	4·4	4·0	5·4	7·3	10·6	6·0	8·9	4·8	6·8
2 ..	5·5	3·7	4·4	6·0	4·0	6·4	8·0	8·5	5·5	5·3	5·5	7·3
3 ..	6·1	4·3	5·8	7·8	4·8	7·5	6·5	11·7	7·9	3·7	6·0	7·6
4 ..	4·7	7·0	4·6	8·1	5·0	6·2	6·5	13·4	9·2	4·5	5·4	6·8
5 ..	4·7	6·3	5·2	8·5	5·4	4·7	4·8	13·2	7·7	5·7	7·3	5·0
6 ..	4·4	5·3	5·5	8·1	5·2	4·0	5·2	10·3	5·5	15·5	6·3	5·0
7 ..	7·7	3·1	3·0	8·8	5·5	4·5	5·6	10·4	8·1	6·4	4·2	4·8
8 ..	8·9	2·8	4·4	7·9	5·0	3·9	5·6	11·1	10·9	5·9	3·5	3·5
9 ..	5·5	4·5	6·5	5·1	5·6	4·7	5·2	8·1	6·2	3·3	3·7	5·2
10 ..	6·2	7·3	4·3	5·9	5·1	5·2	6·9	7·8	6·2	4·3	3·7	6·2
11 ..	5·4	7·5	4·5	8·1	4·2	5·2	11·7	8·6	5·2	2·9	5·5	4·9
12 ..	5·5	5·3	4·2	10·2	3·5	5·3	6·7	5·7	4·7	5·1	3·0	4·6
13 ..	3·6	5·0	7·6	11·5	4·2	5·5	4·4	6·5	4·5	4·2	5·6	5·4
14 ..	4·0	3·5	7·7	3·5	4·6	5·3	5·5	6·0	4·3	4·2	4·7	4·3
15 ..	6·8	7·2	6·7	4·5	4·5	5·4	5·7	6·0	6·2	6·3	4·3	4·9
16 ..	7·9	10·1	4·4	4·1	5·9	5·6	6·1	6·6	6·2	4·3	6·2	5·2
17 ..	4·6	8·5	4·7	6·7	7·0	6·5	6·7	6·2	4·9	5·1	5·1	6·8
18 ..	3·2	7·4	4·7	6·9	6·0	4·9	7·8	6·6	4·7	4·8	5·5	5·7
19 ..	3·7	7·5	5·3	8·6	5·7	6·7	5·6	5·2	6·3	4·6	4·4	7·0
20 ..	4·3	8·7	5·2	7·9	5·7	11·1	6·2	4·7	5·7	5·8	5·0	7·2
21 ..	4·9	6·7	3·7	4·2	5·7	16·2	8·0	6·1	3·1	4·5	4·9	7·2
22 ..	3·6	3·5	5·4	5·1	4·5	15·9	3·1	3·7	3·2	5·0	5·2	6·9
23 ..	4·0	3·5	3·8	7·0	3·8	7·0	8·2	5·0	5·0	4·1	4·6	3·9
24 ..	6·8	3·1	3·5	6·7	5·0	6·2	9·3	8·1	5·3	2·0	4·7	4·6
25 ..	8·2	4·1	4·3	5·1	8·7	9·4	9·5	6·8	5·4	3·7	4·2	3·5
26 ..	6·5	4·9	5·3	5·0	6·7	9·8	9·7	7·9	3·2	5·9	3·7	3·1
27 ..	7·5	5·5	7·0	5·9	5·8	9·2	11·7	7·1	2·8	6·5	4·4	5·1
28 ..	8·6	3·8	3·6	6·1	5·8	7·2	11·3	5·3	4·2	4·7	4·2	6·2
29 ..	7·4		4·0	7·6	5·3	7·6	12·1	5·0	10·4	5·0	3·8	6·0
30 ..	6·7		5·1	5·0	5·2	8·6	15·0	5·6	9·5	5·5	5·0	5·3
31 ..	4·2		5·3		5·4		11·5	7·1		4·5		4·4
Monthly Mean.	5·7	5·5	4·9	6·7	5·3	7·0	7·7	7·6	5·9	5·2	4·8	5·5
Annual Variation.	− 0·3	− 0·5	− 1·1	+ 0·7	− 0·7	+ 1·0	+ 1·7	+ 1·6	− 0·1	− 0·8	− 1·2	− 0·5

TABLE VI*g*.—*Showing the Mean diurnal inequality of the Velocity of the Wind in miles per hour for each month of the year 1915 and for the whole year.*

1915. Bombay Civil Time Hourly Intervals.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
0 to 1	− 1·8	− 1·5	− 1·5	+ 0·1	− 1·0	+ 0·2	− 0·2	− 0·3	− 1·3	− 0·3	− 1·6	− 1·8	− 0·9
1 „ 2	− 1·8	− 1·2	− 1·4	− 0·8	− 0·9	− 0·4	− 0·3	+ 0·1	− 1·2	− 0·7	− 1·1	− 1·3	− 0·9
2 „ 3	− 1·9	− 1·0	− 1·3	− 1·3	− 0·9	− 0·3	+ 0·1	− 0·1	− 1·6	− 0·8	− 1·2	− 1·0	− 0·9
3 „ 4	− 1·6	− 1·1	− 1·2	− 1·7	− 1·0	− 1·3	+ 0·2	0·0	− 1·3	− 0·4	− 0·7	− 0·5	− 0·9
4 „ 5	− 1·3	− 1·1	− 1·0	− 2·1	− 0·9	− 1·6	+ 0·2	− 0·3	− 1·0	− 0·1	− 0·6	+ 0·3	− 0·8
5 „ 6	− 1·1	− 0·9	− 1·2	− 2·6	− 1·0	− 1·6	− 0·6	− 0·1	− 1·3	+ 0·4	− 0·6	+ 0·4	− 0·9
6 „ 7	− 1·1	− 0·9	− 1·1	− 3·1	− 0·9	− 1·8	+ 0·1	+ 0·1	− 0·6	+ 0·5	0·0	+ 0·7	− 0·7
7 „ 8	− 1·1	− 1·2	− 0·6	− 2·7	− 0·8	− 1·6	+ 0·1	− 0·1	− 0·6	+ 0·6	+ 0·3	+ 0·6	− 0·6
8 „ 9	− 0·7	− 1·1	− 0·2	− 2·4	− 0·4	− 1·2	0·0	0·0	− 0·6	+ 0·6	+ 0·2	+ 0·8	− 0·4
9 „ 10	− 1·0	− 1·0	− 0·5	− 1·7	− 0·2	− 0·2	− 0·2	− 0·5	− 0·3	0·0	− 0·3	+ 0·4	− 0·5
10 „ 11	− 1·3	− 1·1	− 1·0	− 0·5	− 0·1	− 0·2	− 0·6	− 0·5	− 0·4	− 0·7	− 1·8	− 0·5	− 0·7
11 „ 12	− 1·7	+ 0·1	+ 0·1	+ 0·5	+ 0·4	+ 0·6	− 0·1	+ 0·1	+ 0·4	− 0·1	− 1·9	− 1·1	− 0·2
12 „ 13	− 0·8	+ 1·0	+ 1·9	+ 1·5	+ 1·2	+ 1·5	+ 0·1	+ 0·7	+ 1·0	+ 0·3	− 0·9	− 1·2	+ 0·4
13 „ 14	+ 0·6	+ 1·6	+ 2·0	+ 2·5	+ 1·8	+ 1·8	+ 0·1	+ 0·5	+ 1·7	+ 0·8	+ 0·3	− 0·6	+ 1·1
14 „ 15	+ 1·7	+ 2·1	+ 2·5	+ 3·3	+ 1·9	+ 1·4	− 0·1	+ 0·5	+ 2·2	+ 1·0	+ 1·4	+ 0·4	+ 1·5
15 „ 16	+ 2·8	+ 2·5	+ 3·3	+ 3·3	+ 1·9	+ 1·5	+ 0·2	+ 0·8	+ 2·2	+ 1·0	+ 2·2	+ 1·3	+ 1·9
16 „ 17	+ 3·3	+ 2·4	+ 2·8	+ 3·1	+ 1·8	+ 1·7	+ 0·8	+ 0·2	+ 2·4	+ 0·7	+ 2·3	+ 1·5	+ 1·9
17 „ 18	+ 3·0	+ 2·2	+ 2·2	+ 2·2	+ 1·4	+ 1·2	+ 0·7	− 0·3	+ 1·9	+ 0·3	+ 2·4	+ 1·9	+ 1·6
18 „ 19	+ 3·4	+ 1·9	+ 1·2	+ 1·5	+ 0·7	+ 0·3	+ 0·2	− 0·3	+ 0·8	+ 0·4	+ 2·6	+ 1·8	+ 1·2
19 „ 20	+ 3·2	+ 1·5	+ 0·3	+ 0·3	− 0·2	0·0	− 0·2	− 0·2	+ 0·5	+ 0·4	+ 2·0	+ 1·7	+ 0·8
20 „ 21	+ 1·8	+ 0·5	− 0·5	− 0·1	− 0·6	+ 0·5	0·0	− 0·2	0·0	− 0·2	+ 1·1	+ 0·4	+ 0·2
21 „ 22	− 0·2	− 0·5	− 1·0	0·0	− 1·2	0·0	− 0·6	− 0·1	− 0·3	− 0·6	− 0·6	− 1·1	− 0·5
22 „ 23	− 1·4	− 1·3	− 1·3	0·0	− 1·1	+ 0·2	− 0·6	− 0·2	− 0·7	− 1·0	− 1·5	− 1·6	− 0·9
23 „ 24	− 1·9	− 1·5	− 1·5	+ 0·3	− 0·9	− 0·1	− 0·2	− 0·5	− 1·1	− 0·9	− 1·7	− 1·9	− 1·0
Range.	5·3	4·0	4·8	6·4	3·1	3·6	1·4	1·3	4·0	2·0	4·5	3·8	2·9

		Miles.
The mean velocity for June to August	..	7·4
The mean velocity for September to May	..	5·5
The mean velocity for the year	..	6·0

Temperature of the Ground, 1915.

TABLE VIIa.—*Showing for each month the Mean Temperature of the Ground in the Thermometer Shed and its Annual Variation at the respective depths of 1, 9, 20, 60 and 132 inches below the surface.*

Depth.	1 inch.		9 inches.		20 inches.		60 inches.		132 inches.	
Month.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.	Mean Temperature.	Excess over the yearly Mean.
	°	°	°	°	°	°	°	°	°	°
January ..	76·7	−5·4	76·6	−5·4	80·2	−4·1	83·2	−1·4	82·9	−0·5
February .	76·3	−5·8	76·2	−5·8	79·5	−4·8	82·2	−2·4	82·3	−1·1
March ..	80·8	−1·3	79·3	−2·7	80·9	−3·4	82·3	−2·3	82·2	−1·2
April ..	85·0	+2·9	83·0	+1·0	84·0	−0·3	83·5	−1·1	82·7	−0·7
May ..	87·7	+5·6	85·9	+3·9	86·8	+2·5	85·0	+0·4	83·2	−0·2
June ..	86·3	+4·2	86·4	+4·4	88·5	+4·2	86·7	+2·1	83·9	+0·5
July ..	83·8	+1·7	84·2	+2·2	86·6	+2·3	86·8	+2·2	84·0	+0·6
August ..	82·6	+0·5	83·1	+1·1	85·5	+1·2	85·7	+1·1	83·9	+0·5
September	82·7	+0·6	83·0	+1·0	85·3	+1·0	85·2	+0·6	84·0	+0·6
October ..	83·0	+0·9	83·4	+1·4	85·3	+1·0	85·0	+0·4	84·1	+0·7
November .	82·7	+0·6	83·1	+1·1	85·5	+1·2	84·9	+0·3	83·9	+0·5
December	78·1	−4·0	79·4	−2·6	83·6	−0·7	84·6	0·0	83·5	+0·1
Year.	82·1		82·0		84·3		84·6		83·4	

TABLE VIIb.—*Showing for each of the five observation hours and for the mean of the day, the Temperature of the Ground exposed to the direct rays of the Sun at the depths of 1 inch and 8 inches below the surface.*

Depth from surface.	* 1 inch.						8 inches.					
Month.	Observation Hours.					Mean of five observation hours.	Observation Hours.					Mean of five observation hours.
	6	10	14	16	22		6	10	14	16	22	
	°	°	°	°	°	°	°	°	°	°	°	°
January ..	69·9	84·9	111·8	98·4	76·7	88·3	78·0	77·3	78·1	79·0	79·5	78·4
February .	70·5	85·8	113·8	109·4	77·6	91·4	79·2	78·3	79·3	80·2	81·2	79·6
March ..	77·9	90·3	121·8	118·1	84·6	98·6	86·1	85·3	87·0	88·9	89·8	87·4
April ..	84·0	97·7	130·3	124·7	90·6	105·4	94·2	93·3	95·1	96·9	97·9	95·5
May ..	88·2	100·2	129·5	124·2	93·2	107·1	99·8	98·6	100·9	102·5	103·6	101·1
June ..	85·9	94·8	114·1	111·0	89·3	99·0	96·6	95·6	96·9	98·2	99·0	97·3
July ..	80·2	86·0	95·3	93·5	82·2	87·4	85·7	85·2	86·6	87·7	88·2	86·7
August ..	79·9	85·3	94·2	91·6	82·2	86·6	85·1	85·1	86·5	87·3	87·3	86·3
September	79·6	86·8	100·1	96·8	83·3	89·3	85·3	84·9	86·6	87·7	87·8	86·5
October ..	79·9	87·6	97·6	95·2	83·2	88·7	84·3	83·8	85·1	86·0	86·7	85·2
November .	79·2	95·7	115·5	103·3	85·4	95·8	84·7	84·0	85·3	86·0	86·7	85·3
December	72·5	85·7	110·2	95·6	77·9	88·4	79·4	78·7	79·6	80·3	80·8	79·8
Year.	79·0	90·1	111·2	105·1	83·8	93·8	86·5	85·8	87·2	88·4	89·0	87·4

* From the beginning of 1915 a new thermometer No. 3426 by Munro has been read in place of an old one No. 122 by Newman which was in use from April 1909 to December 1914.

Maxima and Minima of different Meteorological Elements, 1915.

TABLE VIII.—*In which are collected the individual observations in each month of the year which showed the greatest and the least values of the following elements, viz., Height of Barometer corrected for Temperature, Temperature of Air, Pressure of Vapour and Additional Capacity of Air, and Ground Temperatures, 1 inch and 8 inches below the surface (exposed to Solar rays).*

1915.	Height of Barometer.			Temperature of Air.			Pressure of Vapour.			Additional Capacity.			Ground Thermometer 1 inch deep.			Ground Thermometer 8 inches deep.		
Month.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.	Greatest.	Least.	Range.
	In.	In.	In.	°	°	°	In.	In.	In.	In.	In.	In.	°	°	°	°	°	°
January ..	30·112	29·813	0·299	85·9	63·7	22·2	0·826	0·306	0·520	0·763	0·066	0·697	119·0	63·2	55·8	84·3	73·9	10·4
February ..	·055	·820	·235	84·9	64·0	20·9	·794	·296	·498	·869	·056	·813	123·5	62·2	61·3	86·2	75·1	11·1
March ..	·065	·717	·348	90·1	70·2	19·9	·960	·463	·497	·799	·036	·763	132·2	73·0	59·2	95·1	81·8	13·3
April ..	29·982	·669	·313	90·6	76·0	14·6	1·036	·616	·420	·639	·097	·542	135·0	80·8	54·2	101·7	90·3	11 4
May ..	·874	·610	·264	92·5	79·6	12·9	·045	·806	·239	·556	·103	·453	134·5	83·0	51·5	106·6	90·3	16·3
June ..	·821	·464	·357	93·0	77·3	15·7	·041	·845	·196	·668	·013	·655	136·0	77·0	59·0	107·2	79·8	27·4
July ..	·863	·439	·424	88·4	76·2	12·2	·089	·809	·280	·363	·025	·338	111·5	77·0	34·5	94·0	80·7	13·3
August ..	·854	·549	·305	86·0	75·8	10·2	0·995	·769	·226	·358	·045	·313	109·0	77·0	32·0	93·2	81·8	11·4
September ..	·872	·573	·299	86·3	75·9	10·4	1·011	·788	·223	·366	·036	·330	111·5	72·5	39·0	93·2	81·2	12·0
October ..	·950	·641	·309	89·3	75·3	14·0	·069	·549	·520	·830	·057	·773	118·5	76·3	42·2	90·6	81·9	8·7
November ..	30·024	·644	·380	91·0	73·3	17·7	·039	·466	·573	·692	·056	·636	118·7	74·9	43·8	89·5	82·2	7·3
December ..	·087	·830	·257	87·4	68·2	19·2	0·795	·401	·394	·849	·048	·801	115·4	69·0	46·4	85·3	77·4	7·9
Year.	30·112	29·439	0·673	93·0	63·7	29·3	1·089	0·296	0·793	0·869	0·013	0·856	136·0	62·2	73·8	107·2	73·9	33·3

Relative Humidity of the Air, 1915.

TABLE IXa.—*Daily and Monthly Means of Observations taken at 6, 10, 14, 16 and 22 hours daily.*

Complete Saturation=1·000.

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	0·665	0·803	0·816	0·784	0·759	0·710	0·873	0·845	0·847	0·848	0·710	0·658
2 ..	·651	·798	·761	·740	·745	·719	·837	·845	·823	·848	·718	·529
3 ..	·587	·706	·788	·714	**·766**	·706	·842	·843	·829	·869	·715	**·485**
4 ..	·675	**·825**	·765	·765	·744	·713	·821	·873	·803	·837	**·618**	·516
5 ..	·637	·723	·769	·768	·749	·708	·809	·896	·793	·864	·640	·634
6 ..	·676	·671	·710	·771	·742	·709	·814	·859	·849	**·915**	·684	·636
7 ..	**·495**	·748	·760	·642	·743	·718	·784	·844	·816	·877	·733	·700
8 ..	·524	·776	·784	·681	·721	·709	·774	·851	·889	·872	·795	·665
9 ..	·571	·779	·723	**·641**	·710	·680	·778	·821	**·945**	·741	·824	·743
10 ..	·658	·647	·722	·676	·707	·676	·846	·801	·868	·765	**·873**	·732
11 ..	·603	·522	·694	·685	·729	**·674**	·838	·809	·869	·830	·765	·757
12 ..	·593	·653	·752	·675	·722	·700	·829	·783	·832	·812	·707	·784
13 ..	·651	·761	·627	·678	·747	·683	·798	·782	·797	·821	·694	·802
14 ..	·715	·746	·609	·666	·742	·693	**·773**	**·780**	**·778**	·742	·660	·798
15 ..	·548	·650	·687	·700	·744	·700	·889	·794	·814	·805	·739	·759
16 ..	·506	·696	·722	·707	·766	·739	·903	·803	·807	·852	·707	·737
17 ..	·645	·570	·720	·755	**·704**	·752	·881	·825	·829	·785	·759	·629
18 ..	·762	·579	·762	·686	·704	·846	·869	·783	·825	·796	·669	·612
19 ..	·766	**·506**	·747	·643	·723	·856	·839	·781	·798	·773	·740	·626
20 ..	·733	·517	·789	·708	·722	·894	·862	·842	·849	·789	·752	·612
21 ..	·713	·569	·711	·780	·739	·854	·840	·876	·882	·811	·762	·636
22 ..	·747	·728	·642	·790	·714	·809	·890	·863	·873	·839	·771	·618
23 ..	**·830**	·723	**·819**	·781	·723	·808	·905	·888	·838	·824	·769	·718
24 ..	·776	·750	·788	·721	·721	·870	·831	·827	·854	·884	·772	·715
25 ..	·639	·756	·780	·715	·749	·950	·825	**·925**	·895	·849	·810	·745
26 ..	·712	·750	·765	·746	·753	**·958**	·838	·838	·868	·798	·807	**·841**
27 ..	·701	·793	**·561**	·733	·732	·949	·858	·818	·887	·818	·791	·792
28 ..	·565	·803	·706	**·796**	·720	·948	**·915**	·835	·888	·751	·801	·729
29 ..	·539		·755	·793	·729	·933	·842	·848	·892	·688	·762	·740
30 ..	·661		·756	·733	·714	·865	·893	·831	·870	**·675**	·754	·699
31 ..	·793		·793		·711		·852	·854		·745		·705
Monthly Mean.	**0·656**	0·698	0·735	0·722	0·732	0·784	0·843	0·835	**0·847**	0·810	0·744	0·689
Annual Variation.	−·102	−·060	−·023	−·036	−·026	+·026	+·085	+·077	+·089	+·052	−·014	−·069

Annual Mean ..0·758

Extent of cloudy Sky, 1915.

TABLE IXb.—*Daily and Monthly Means of Observations taken at 6, 10, 14, 16 and 22 hours daily, the whole Sky being reckoned as 10·0.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	..	1·6	6·4	2·4	3·0	3·6	9·6	**10·0**	6·2	3·0	..	..
2 ..	..	**7·4**	**8·0**	1·0	**2·2**	**1·4**	9·0	8·4	5·4	2·0	..	..
3 ..	..	2·8	3·6	1·8	5·0	2·0	8·8	9·6	6·6	6·0	..	..
4 ..	0·6	5·0	1·2	0·4	4·0	5·2	7·0	10·0	7·4	5·8	1·4	..
5 ..	0·8	..	1·2	2·6	4·0	3·4	7·0	10·0	9·2	6·0	2·6	..
6 ..	0·4	..	0·4	4·0	4·0	5·0	6·0	9·6	8·0	**8·6**	4·6	..
7 ..	0·8	..	0·8	2·6	3·8	3·2	6·0	8·2	8·8	7·6	**7·4**	..
8 ..	0·2	0·8	4·4	3·0	4·0	5·0	4·2	10·0	9·8	7·4	2·6	..
9 ..	0·2	1·4	3·2	2·4	4·6	2·6	5·6	9·0	**10·0**	4·2	3·0	..
10 ..	..	2·0	2·0	0·2	3·8	1·6	8·0	8·6	8·0	2·0	4·0	..
11 ..	..	0·2	0·8	2·8	3·6	2·8	6·0	6·8	9·0	8·4	2·6	..
12 ..	3·0	..	4·0	1·2	2·8	2·4	4·0	**5·2**	7·6	6·0	2·4	..
13 ..	2·6	0·2	5·2	5·0	3·4	3·8	**3·8**	7·6	4·0	8·2	4·4	..
14 ..	2·4	1·0	6·6	4·4	2·8	4·0	3·8	6·4	**2·4**	2·8	..	0·6
15 ..	3·4	1·6	1·2	5·6	3·6	4·0	**10·0**	8·4	2·8	2·2	1·2	1·6
16 ..	1·2	0·6	..	**8·0**	**5·6**	5·0	9·4	9·2	2·6	7·8	1·6	1·0
17 ..	0·6	0·4	0·4	6·0	3·8	8·2	8·0	9·2	5·0	4·8	4·6	0·6
18 ..	0·4	1·2	3·6	6·0	4·8	9·6	8·4	7·0	3·8	2·6	2·4	7·0
19 ..	1·2	2·4	2·2	4·0	5·2	9·6	8·4	8·2	2·4	3·6	1·4	1·8
20 ..	1·8	0·8	0·8	1·8	5·2	9·4	8·6	9·2	6·0	1·8	3·4	4·0
21 ..	0·4	..	1·0	2·0	4·2	8·2	8·4	9·0	10·0	3·8	5·0	1·0
22 ..	7·6	..	0·2	3·2	3·0	5·2	6·6	10·0	6·8	2·8	3·0	0·6
23 ..	**9·6**	..	1·2	3·2	2·6	7·4	9·0	9·4	6·0	3·4	1·2	0·2
24 ..	4·8	0·4	1·6	0·2	4·0	**10·0**	5·8	8·0	7·4	4·8	2·0	..
25 ..	3·0	2·2	0·8	..	4·0	10·0	8·4	10·0	7·2	4·0	2·4	4·4
26 ..	4·2	2·0	4·0	2·0	5·0	10·0	9·6	7·4	4·6	3·4	2·2	**8·4**
27 ..	1·2	0·8	1·0	2·8	5·0	10·0	10·0	7·0	6·8	4·0	1·4	1·0
28 ..	1·0	2·2	1·4	4·4	3·2	10·0	10·0	7·4	8·6	2·2	1·0	0·4
29 ..	..		2·2	4·8	4·0	10·0	9·4	7·2	9·8	0·2	1·0	1·0
30 ..	0·2		2·0	5·6	3·6	10·0	10·0	9·6	8·0	..	0·2	..
31 ..	1·8		2·0		3·2		10·0	8·6		..	..	..
Monthly Mean.	1·7	1·3	2·4	3·1	3·9	6·1	7·7	**8·5**	6·7	4·2	2·3	1·1
Annual Variation.	− 2·4	− 2·8	− 1·7	− 1·0	− 0·2	+ 2·0	+ 3·6	+ 4·4	+ 2·6	+ 0·1	− 1·8	− 3·0

For the days which have no entry 0·0 is to be understood.
Means of the months from January to April, November and December .. 2·0
Mean of the months from May to October .. .. .. 6·2
Mean for the year .. .. 4·1

Meteorological Data, 1915.

Table X.—Five-day Means, 1915.

Number of Five-day Period.	Barometric Pressure.	Temperature of the Air.	Pressure of Vapour.	Additional Capacity of the Air.	Rainfall.*	North or South Component of Wind.	East or West Component of Wind.	Number of Five-day Period.	Barometric Pressure.	Temperature of the Air.	Pressure of Vapour.	Additional Capacity of the Air.	Rainfall.*	North or South Component of Wind.	East or West Component of Wind.
	In.	°	In.	In.	In.	Miles.	Miles.		In.	°	In.	In.	In.	Miles.	Miles.
1	29·967	74·6	0·565	0·299	....	4·1 N	0·5 W	38	29·755	83·6	0·926	0·226	0·20	2·6 S	5·3 W
2	·984	**72·1**	**·476**	·320	....	5·9 N	0·3 W	39	·781	82·3	·912	·195	0·73	4·1 S	1·7 W
3	·980	75·8	·571	·327	....	3·7 N	0·3 E	40	·650	81·6	·944	·137	2·64	0·1 N	1·8 W
4	**30·009**	73·6	·593	·242	....	3·7 N	1·2 W	41	·589	82·9	**·982**	·147	1·74	0·0	3·8 W
5	29·963	76·1	·681	·222	....	4·7 N	2·1 W	42	·679	81·6	·925	·158	7·39	2·5 S	11·7 W
6	·933	73·1	·515	·305	....	6·1 N	2·0 W	43	·604	81·7	·926	·157	2·02	2·5 S	12·7 W
7	·918	74·6	·683	·180	0·30	0·6 S	0·2 E	44	·694	80·7	·911	·136	1·66	1·1 S	**13·4** W
8	·947	72·8	·609	·204	....	1·8 N	0·4 W	45	·775	82·4	·893	·215	0·02	3·3 S	8·0 W
9	·902	74·7	·589	·278	....	4·6 N	2·0 W	46	·773	81·9	·876	·214	0·08	2·0 S	6·9 W
10	·930	73·2	·520	·303	....	**7·3** N	4·3 W	47	·731	79·9	·881	·142	2·98	0·7 S	2·6 W
11	·921	72·8	·542	·273	....	2·6 N	1·5 W	48	·718	80·8	·896	·156	2·46	0·2 N	7·3 W
12	·916	76·0	·709	·191	....	0·7 N	1·6 W	49	·759	81·5	·904	·172	1·25	2·3 S	6·4 W
13	·927	76·5	·712	·204	0·64	0·9 N	0·5 W	50	·789	81·4	·876	·196	0·58	1·8 N	7·5 W
14	·969	77·7	·719	·236	....	1·0 N	2·1 W	51	·664	80·3	·908	·130	5·16	1·5 N	6·6 W
15	·954	76·8	·628	·299	0·05	3·8 N	2·9 W	52	·780	81·1	·864	·197	....	3·1 N	3·1 W
16	·948	79·5	·769	·247	....	2·3 N	2·3 W	53	·783	80·8	·898	·156	0·13	3·1 N	1·7 W
17	·869	81·1	·827	·241	....	0·6 N	2·8 W	54	·753	81·0	·931	·130	2·27	1·7 N	0·7 W
18	·879	81·3	·785	·287	....	1·8 N	3·8 W	55	·743	80·3	·912	·124	1·91	5·3 S	1·9 E
19	·882	80·3	·799	·238	....	4·4 N	5·2 W	56	·703	81·5	·943	·135	2·11	5·4 S	2·0 W
20	·885	81·5	·764	·314	....	5·5 N	4·3 W	57	·766	80·1	·831	·197	0·09	0·6 S	2·4 W
21	·856	83·3	·791	·354	....	5·2 N	3·6 W	58	·834	79·6	·817	·195	0·98	2·0 S	1·1 W
22	·808	84·7	·848	·347	0·02	2·4 N	3·1 W	59	·825	81·3	·868	·204	....	3·2 N	1·6 W
23	·783	84·6	·923	·267	....	0·0	3·8 W	60	·810	83·3	·964	·178	....	2·4 N	2·2 W
24	·805	83·5	·888	·263	0·04	2·5 N	4·3 W	61	·834	81·3	·781	·292	....	2·6 N	0·4 E
25	·759	84·5	·924	·265	....	1·3 S	3·8 W	62	·803	79·5	·711	·302	....	3·8 N	0·7 E
26	·689	85·5	·910	·318	....	2·6 S	5·2 W	63	·825	81·7	·865	·222	0·02	0·8 N	0·1 W
27	·744	86·5	·949	·316	....	2·7 S	3·0 W	64	·851	79·5	·729	·283	....	2·3 N	0·5 E
28	·768	86·2	·923	·329	0·36	3·0 S	6·3 W	65	·879	80·4	·776	·268	....	3·1 N	0·5 W
29	·802	86·4	·939	·324	....	0·4 N	5·8 W	66	·849	82·3	·881	·229	....	2·6 N	0·3 W
30	·799	86·8	·946	·331	....	1·1 N	6·0 W	67	·909	80·9	·805	·252	....	2·4 N	0·7 W
31	·749	86·4	·920	·344	....	1·6 N	6·4 W	68	·940	76·5	·535	·385	....	3·0 N	2·1 E
32	·726	86·7	·921	·352	....	0·1 S	4·5 W	69	·959	74·4	·633	·226	....	2·6 N	0·5 E
33	·683	**87·1**	·905	**·386**	....	0·4 N	5·6 W	70	·970	74·4	·670	·187	....	3·5 N	1·2 W
34	·680	85·6	·962	·271	2·36	0·3 S	3·9 W	71	·974	76·9	·607	·323	....	2·7 N	2·7 E
35	**·553**	82·6	·949	·169	4·22	**8·2 S**	**3·3 E**	72	·925	75·5	·660	·299	0·07	1·3 N	1·0 E
36	·576	79·1	·939	**·053**	**33·03**	3·1 S	6·1 W	73	·928	76·1	·678	·226	....	3·8 N	0·2 W
37	·665	82·5	·946	·165	0·87	3·3 S	8·4 W								

* Five-day sums, *not means*.

TABLES OF DISTURBANCES

REGISTERED BY

MILNE'S SEISMOGRAPH, COLABA SEISMOGRAPHS, OMORI EWING SEISMOGRAPH AND COLABA VERTICAL MOVEMENT (TILT) SEISMOGRAPH.

1911—1915.

M N 78—20

NOTE ON THE LIST OF SEISMIC DISTURBANCES RECORDED BY THE DIFFERENT SEISMOGRAPHS AT COLABA.

As already remarked in the Introduction where a brief description of the several instruments in use has been given, seismographic work commenced in this Observatory in 1898 when Milne's Seismograph was received and installed in September 1898 in connection with the international scheme of seismographic work initiated by the British Association for the Advancement of Sicence. Two other horizontal pendulums designed locally in 1900, which from time to time had to be modified for experimental and investigational purposes, were added to the installation from April 1900, and a vertical motion (tilt) seismograph, which was ordered out from England, the detail specification and design of which were also conceived locally, was installed from May 1902. An Omori-Ewing horizontal pendulum was supplemented in November 1907.

Thus the seismographic data and results of investigations have accumulated at the Observatory slowly during the last twenty years. It is proposed to publish the full data and their discussion in a special volume which it is hoped will be completed and issued at an early date. For this and other reasons the charts of the principal disturbances which usually accompanied the tables in these volumes, have not been included this time, as it is intended that the whole work may be embodied in one special volume indicating all the seismographic work done at this Observatory since its inception in 1898.

TABLE I.—*List of Principal Disturbances registered by Milne's Seismograph at Colaba, Bombay.*

1911.

Observatory number.	Date.	Time of Disturbance in G. M. T. Beginning.	Maximum.	End.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. M.	H. M.	H. M.	mm.	
2	1911 January 1 ..	10 21·9	10 30·7	11 1·2	8·3	Linear magnification 1 to 9.
3	,, ,, 1 ..	15 8·7	15 11·6	..	1·4	End lost in shifting time.
5	,, ,, 2–3 ..	23 14·5	23 53·3	0 17·5	0·3	
8	,, ,, 3 ..	7 47·3	7 56·6	8 11·5	0·3	
9	,, ,, 3–4 ..	23 31·2	..	3 33·9	..	Traces overlap due to intensity of the disturbance and hence maximum phase cannot be ascertained.
13	,, ,, 4 ..	9 49·6	9 52·0	10 7·2	1·3	
18	,, ,, 7 ..	2 25·8	2 54·8	3 30·6	0·9	
21	,, ,, 14 ..	18 4·1	18 6·7	18 24·3	0·5	
24	,, ,, 16 ..	9 9·4	9 28·8	9 45·2	0·4	
62	,, February 18 ..	18 46·0	..	20 35·4	..	Traces overlap due to intensity of the disturbance and hence maximum phase cannot be ascertained.
70	,, ,, 23 ..	11 30·8	11 45·9	12 9·6	0·5	
164	,, April 7 ..	7 7·3	7 33·9	8 24·8	0·7	
196	,, ,, 18 ..	18 19·3	18 29·1	19 44·7	14·8	
212	,, ,, 29 ..	5 29·3	5 42·8	6 7·9	0·5	
216	,, May 4 ..	13 42·2	13 51·8	14 25·0	0·7	
217	,, ,, 4–5 ..	23 48·3	0 23·3	1 56·7	2·3	
220	,, ,, 11 ..	4 25·0	4 32·9	4 58·9	0·5	
261	,, June 7 ..	11 24·3	12 39·7	14 31·4	5·0	
262	,, ,, 8 ..	0 9·1	0 24·3	0 34·9	0·5	
284	,, ,, 15 ..	14 35·1	14 58·6	17 39·9	6·9	
287	,, ,, 17 ..	5 39·7	5 41·2	5 57·1	0·3	
321	,, July 4 ..	13 37·3	13 41·4	15 25·8	4·4	
322	,, ,, 5 ..	2 20·1	2 24·1	2 37·2	1·2	
325	,, ,, 5 ..	18 50·0	18 56·6	19 30·3	0·4	
342	,, ,, 12 ..	4 16·5	4 42·9	6 53·2	6·5	
347	,, ,, 19 ..	20 39·8	20 57·5	21 8·5	0·5	
387	,, August 16 ..	22 52·3	23 25·6	..	2·7	End mixed up in the beginning of the following disturbance.

1911—*continued.*

Observatory number.	Date.	Time of Disturbance in G. M. T. Beginning.	Maximum.	End.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. M.	H. M.	H. M.	mm.	
388	1911 August 17 ..	..	1 30·2	2 30·6	1·0	Beginning mixed up in the end of the preceding disturbance.
393	,, ,, 18 ..	3 29·2	3 30·2	3 38·8	0·3	
398	,, ,, 21 ..	16 55·8	17 9·3	18 4·2	0·2	
401	,, ,, 23 ..	16 55·5	16 56·5	17 14·5	0·3	
423	,, September 6 ..	1 13·2	1 17·3	1 38·0	0·2	
426	,, ,, 8 ..	23 23·3	23 30·4	23 44·5	0·4	
432	,, ,, 15 ..	13 39·8	14 35·3	15 27·7	1·0	
434	,, ,, 17 ..	3 44·9	4 16·4	6 39·1	3·6	
442	,, ,, 22 ..	5 53·6	5 54·8	6 21·2	0·4	
444	,, ,, 26 ..	14 16·6	14 23·7	14 39·6	0·4	
447	,, October 6 ..	11 28·8	11 41·2	12 16·7	0·4	
449	,, ,, 13 ..	3 10·6	3 19·1	3 36·3	0·3	
450	,, ,, 14 ..	6 48·7	6 55·7	7 4·1	0·6	
451	,, ,, 14 ..	13 3·7	13 11·4	13 24·7	1·1	
452	,, ,, 14–15 ..	23 29·1	23 31·2	0 6·8	14·8	
453	,, ,, 15 ..	12 28·5	12 36·0	12 52·2	0·6	
459	,, ,, 17 ..	12 8·1	12 38·7	13 32·5	0·9	
476	,, November 13 ..	16 36·1	17 0·8	17 41·9	5·7	
481	,, ,, 30 ..	23 44·3	23 45·0	23 49·7	0·4	
485	,, December 11 ..	11 11·6	11 18·0	12 16·6	1·4	
488	,, ,, 13 ..	9 3·3	9 9·8	9 16·3	0·5	
492	,, ,, 16 ..	19 35·9	20 43·4	21 44·5	3·3	
497	,, ,, 20 ..	6 19·2	6 46·4	7 12·9	1·4	
504	,, ,, 29 ..	16 18·2	16 23·3	16 33·7	0·3	
507	,, ,, 31 ..	6 28·4	6 53·2	7 13·1	0·4	

1912.

4	1912 January 4 ..	16 10·9	16 40·7	17 13·2	0·9	Linear magnification 1 to 9.
18	,, ,, 26 ..	14 50·7	14 59·2	15 8·8	0·4	
24	,, ,, 31 ..	..	21 15·5	..	0·5	Beginning and end mixed up in tremors.
82	,, March 24 ..	12 29·0	12 35·5	12 47·8	0·3	
89	,, April 1 ..	5 19·1	5 23·1	5 30·3	0·4	
116	,, ,, 23 ..	21 52·4	21 59·6	22 10·7	0·5	
119	,, ,, 25 ..	10 34·7	10 35·9	10 42·4	0·2	
141	,, May 6 ..	19 21·1	19 44·5	20 52·5	1·9	
147	,, ,, 11 ..	17 36·7	17 40·5	18 13·9	1·1	
149	,, ,, 15 ..	..	0 34·8	..	0·3	Beginning and end mixed up in tremors.
157	,, ,, 21 ..	8 38·1	8 44·6	9 26·9	1·0	
161	,, ,, 23 ..	2 28·9	..	4 42·7	..	S at 2^h 33·6^m. Traces over lap due to intensity of the disturbance, and hence maximum phase cannot be ascertained.
183	,, June 7 ..	10 42·9	10 49·2	..	1·1	End merged into the beginning of the following disturbance.
184	,, ,, 7 ..	..	11 30·5	11 55·3	0·5	Beginning merged into the end of the preceding disturbance.
185	,, ,, 7 ..	12 59·7	13 8·1	13 30·0	0·4	
187	,, ,, 7 ..	18 56·9	19 12·5	19 51·4	1·0	

1912—*continued.*

Observatory number.	Date.	Time of Disturbance in G. M. T. Beginning.	Maximum.	End.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. M.	H. M.	H. M.	mm.	
194	1912 June 8 ..	7 40·3	8 29·1	..	1·8	End merged into the beginning of the following disturbance.
195	,, ,, 8 ..	..	9 45·0	..	1·3	Beginning merged into the end of the preceding disturbance. End mixed with the beginning of the following disturbance.
196	,, ,, 8 ..	..	11 26·9	12 21·0	0·5	Beginning mixed with the end of the preceding disturbance.
197	,, ,, 8 ..	13 45·7	13 52·6	14 29·4	1·3	
201	,, ,, 10 ..	16 39·4	16 59·8	17 44·3	2·5	
206	,, ,, 12 ..	7 53·8	7 58·8	8 14·9	0·5	
217	,, ,, 17 ..	11 58·0	12 1·9	12 17·4	0·7	
220	,, ,, 18 ..	12 16·4	12 50·2	13 49·5	1·0	
227	,, ,, 26 ..	17 2·3	17 9·5	17 26·0	0·6	
241	,, July 7 ..	8 21·3	8 56·2	11 11·0	5·8	
255	,, ,, 24 ..	12 9·0	12 18·7	..	0·7	End mixed with the beginning of the following disturbance.
256	,, ,, 24 ..	..	13 27·0	13 49·9	0·5	Beginning mixed with the end of the preceding disturbance.
258	,, ,, 25–26 ..	23 19·5	23 59·2	0 40·9	0·5	
274	,, August 6 ..	13 33·1	13 41·9	14 20·1	1·5	
279	,, ,, 9 ..	1 37·3	..	5 1·8	..	Traces overlap due to intensity of the disturbance and hence maximum phase cannot be ascertained.
296	,, ,, 17 ..	19 21·1	19 34·6	21 24·5	4·4	
302	,, ,, 21 ..	17 48·8	18 4·8	18 19·4	0·4	
306	,, ,, 23 ..	14 6·6	14 12·2	14 45·6	1·3	
307	,, ,, 23 ..	21 48·4	21 48·8	22 31·6	1·1	
316	,, ,, 31 ..	23 5·4	23 10·9	23 36·2	0·7	
325	,, September 11 ..	0 58·8	1 5·5	1 47·1	2·5	
331	,, ,, 13 ..	23 45·4	23 58·7	..	1·0	Beginning doubtful as it is mixed up in tremors. End mixed up in tremors.
342	,, ,, 26 ..	19 42·5	19 44·4	19 51·2	0·5	
346	,, ,, 29 ..	21 2·9	21 34·6	22 47·8	1·5	
347	,, ,, 29–30 ..	23 21·7	23 41·0	0 2·4	0·5	
359	,, October 12 ..	16 3·1	16 12·7	16 44·6	0·5	
372	,, ,, 18 ..	12 25·8	12 41·3	13 15·0	2·3	
387	,, ,, 31 ..	17 43·5	18 7·6	18 32·0	0·2	
399	,, November 7 ..	8 5·0	8 41·6	9 25·1	2·6	
426	,, ,, 28 ..	21 2·3	..	..	..	Very small disturbance. Phases ill defined.
447	,, December 9 ..	..	0 28·9	..	1·0	Beginning and end mixed up in tremors.
448	,, ,, 9 ..	8 54·0	10 10·9	10 58·7	0·5	
468	,, ,, 24 ..	0 7·5	0 31·6	..	0·3	End mixed up in tremors.
470	,, ,, 24 ..	18 26·5	18 35·7	18 51·6	0·3	
476	,, ,, 28 ..	8 6·9	8 34·6	9 9·4	0·8	

1913.

Observatory number.	Date.			Time of disturbance in G. M. T. Beginning.		Maximum.		End.		Amplitude or half the complete ranges of maximum motion.	Remarks.
				H.	M.	H.	M.	H.	M.	mm.	
19	1913	January	7 ..	23	5·6	23	19·6	...		0·6	Linear magnification 1 to 9. End mixed up in tremors.
27	,,	,,	11 ..	13	26·7	13	52·2	..		3·5	End lost in shifting time. S at 13^h $34{\cdot}1^m$; L at 13^h $48{\cdot}2^m$.
38	,,	,,	19 ..	17	9·7	17 17	17·1 18·4	18	56·6	15·4 15·4	S at 17^h $13{\cdot}7^m$; L at 17^h $15{\cdot}7^m$.
77	,,	February	20 ..	9	18·4	9 9	38·6 42·0	10	10·0	0·7 0·7	S at 9^h $29{\cdot}7^m$; L at 9^h $38{\cdot}0^m$.
110	,,	March	6 ..		..	2	16·6	..		2·7	Beginning and end mixed up in tremors.
111	,,	,,	6 ..	11	10·2	11	11·9	11	57·7	11·0	
123	,,	,,	10 ..	19	15·0	19	15·2	19	19·7	0·4	
132	,,	,,	14 ..	8	54·4	9	22·7	12	36·8	7·0	S at 9^h $1{\cdot}6^m$; L at 9^h $8{\cdot}2^m$.
133	,,	,,	14 ..	18	11·6	18	12·9	18	21·7	0·3	
158	,,	,,	23 ..	20	58·2	21	9·3	21	57·9	0·5	
160	,,	,,	24 ..	10	43·0	10	48·5	11	0·8	0·2	
165	,,	,,	27 ..	3	20·9	3	31·5	3	50·1	0·3	
173	,,	,,	31 ..	4	3·4	4	38·0	6	55·9	2·1	
193	,,	April	7 ..	14	1·9	14	31·0	15	9·1	0·4	
200	,,	,,	9 ..	18	18·2	18	53·9	19	29·4	0·4	
214	,,	,,	13 ..	6	53·2	7	19·8	7	50·8	1·5	
218	,,	,,	14 ..	8	4·8	8	19·8	8	35·0	0·2	
227	,,	,,	18 ..	13	37·4	13	46·5	13	59·9	0·4	
228	,,	,,	18 ..	19	11·2	19	36·5	20	20·3	1·1	
240	,,	,,	24 ..	10	24·0	10	51·3	11	39·5	0·6	
241	,,	,,	24 ..	12	31·7	12	51·6	13	15·8	0·2	
245	,,	,,	25 ..	18	6·0	18	34·1		..	3·0	End mixed up in tremors.
247	,,	,,	26 ..	4	27·1	4	56·0	5	17·5	0·3	
250	,,	,,	28 ..	3	49·5	4	4·0	4	12·7	0·1	
252	,,	,,	28 ..	18	55·3	19	13·6	19	38·8	0·2	
253	,,	,,	29 ..	3	28·2	3	42·4	4	5·2	0·1	
256	,,	,,	30 ..	11	59·9	12	32·8	13	35·6	0·7	
287	,,	May	16 ..	12	36·6	12	45·9	12	58·1	0·2	
291	,,	,,	18 ..		..	2	55·5	4	3·0	0·5	Beginning mixed up in tremors.
300	,,	,,	24 ..		..	19	8·1		..	0·5	Beginning and end mixed up in tremors.
301	,,	,,	24 ..		..	20	43·7		..	0·5	Do. do.
302	,,	,,	25 ..		..	0	51·1		..	0·6	Do. do.
309	,,	,,	29 ..	13	43·2	13	59·3	14	29·6	0·1	
313	,,	,,	30 ..	11	56·3	12	39·3		..	1·0	End mixed up in tremors.
330	,,	June	4 ..		..	10	55·2	11	23·7	0·3	Beginning mixed up in tremors
358	,,	,,	14 ..	9	43·6	10	7·9	11	18·8	0·9	Beginning doubtful.
370	,,	,,	20 ..	18	43·0	19	4·1		..	0·5	End mixed up in tremors.
376	,,	,,	22 ..		..	14	44·4		..	2·0	Beginning and end mixed up in tremors.
391	,,	,,	26 ..	5	17·1	5 6	26·8 9·8	8	15·7	2·5 3·6	
419	,,	July	6 ..	16	33·0	16	52·1	17	16·8	0·4	
421	,,	,,	7 ..	17	58·5	18	28·3	19	11·7	0·3	
443	,,	,,	12 ..	10	42·8	11	6·0	11	22·6	0·5	Beginning doubtful.
484	,,	,,	22 ..	6	52·5	7	29·1	8	16·1	0·2	
507	,,	,,	28 ..	12	4·8	12	52·6	13	47·3	0·5	
518	,,	August	1 ..	17	22·5	17	55·6	19	55·2	1·5	
528	,,	,,	6–7 ..	22	34·1	23	40·4	1	25·7	9·2	

1913—*continued.*

Observatory number.	Date.			Time of disturbance in G. M. T. Beginning.		Maximum.		End.		Amplitude or half the complete ranges of maximum motion.	Remarks.
				H.	M.	H.	M.	H.	M.	mm.	
530	1913	August	7 ..	3	22·7	3	39·9	4	14·7	0·4	
535	,,	,,	13 ..	4	33·1	4	49·7	5	22·0	1·6	
540	,,	,,	15 ..	19	23·7	19	45·9	20	5·5	0·3	
557	,,	,,	30–31 ..	23	26·3	0	4·8	0	40·8	0·5	Beginning doubtful.
568	,,	September	3 ..	21	13·6	21	20·0	22	30·9	0·5	
588	,,	,,	16 ..	12	17·2	12	20·7	12	30·6	1·2	Beginning doubtful.
611	,,	October	2 ..	5	43·0	5	59·3	6	37·5	0·4	Do.
618	,,	,,	11 ..	1	56·1	2	26·8	3	17·2	0·4	
619	,,	,,	11 ..	4	4·4	5	7·1	7	0·9	0·5	
620	,,	,,	11 ..	9	27·3	9	50·3	10	37·6	1·1	
626	,,	,,	14 ..	8	32·2	9	13·9	10	16·9	1·1	Do.
646	,,	,,	29 ..	4	44·1	4	51·0	5	23·2	0·7	
666	,,	November	10 ..	..		22	14·7	..		0·6	Beginning and end mixed in tremors.
670	,,	,,	14 ..	20	57·7	21	2·3	21	4·7	0·2	
678	,,	,,	19 ..	3	30·3	3	57·1	4	30·6	1·1	
682	,,	,,	23 ..	21	59·4	22	8·3	22	23·6	1·0	
692	,,	December	2 ..	20	7·6	20	9·0	20	13·5	0·2	
698	,,	,,	10 ..	7	4·6	7	9·1	7	38·9	0·1	
703	,,	,,	18 ..	7	28·8	7	31·0	7	39·4	0·3	
707	,,	,,	21 ..	15	49·3	15	56·8	17	35·4	2·5	

1914.

14	1914	January	12 ..	9	49·6	10	0·2	10	28·9	0·5	Linear magnification 1 to 9.
23	,,	,,	20 ..	12	7·2	12	49·5	13	17·8	1·1	
34	,,	,,	30 ..	3	55·4	5	5·1	6	12·7	3·9	
35	,,	,,	30 ..	8	49·5	9	6·6	9	39·9	0·2	
47	,,	February	6 ..	11	45·5	11	51·4	12	5·7	1·0	
69	,,	,,	22 ..	..		21	34·4	..		0·4	Beginning and end mixed in tremors.
74	,,	,,	26 ..	5	17·8	6	23·7	6	47·8	0·8	
85	,,	March	6 ..	19	23·7	19	50·0	20	35·6	0·6	
86	,,	,,	6 ..	20	45·9	21	3·8	21	29·8	0·4	
99	,,	,,	14 ..	20	18·9	20	34·9	..		0·9	Beginning doubtful as it is mixed in tremors, end mixed in tremors.
104	,,	,,	18 ..	4	42·7	5	12·6	5	40·9	1·4	
105	,,	,,	18 ..	6	56·0	7	9·6	7	54·8	0·6	
121	,,	,,	27 ..	1	36·9	1	46·0	2	5·1	0·5	
122	,,	,,	28 ..	10	50·2	11	6·0	11	41·1	1·3	
126	,,	,,	30 ..	..		2	45·5	..		0·5	Beginning and end mixed in tremors.
142	,,	April	11 ..	16	53·7	17	42·7	18	34·4	1·2	
156	,,	,,	20 ..	13	53·9	15	9·7	15	44·9	1·1	
164	,,	,,	27 ..	2	21·9	2	27·8	2	38·9	0·2	
169	,,	May	1 ..	6	8·3	6	22·8	6	39·9	0·2	
200	,,	,,	21 ..	8	32·9	8	38·6	8	52·0	0·5	
208	,,	,,	26 ..	2	54·8	2	56·8	3	8·2	0·3	
209	,,	,,	26 ..	14	33·3	15	8·1	..		9·1	End lost in shifting time.
213	,,	,,	29 ..	4	54·4	5	6·8	6	36·9	1·8	
249	,,	June	20 ..	7	38·9	8	30·9	9	8·2	0·6	
259	,,	,,	25 ..	19	13·2	19	29·8	20	51·0	7·6	

1914—*continued.*

Observatory number.	Date.			Time of disturbance in G. M. T. Beginning.		Maximum.		End.		Amplitude or half the complete ranges of maximum motion.	Remarks.
				H.	M.	H.	M.	H.	M.	mm.	
273	1914	July	4	17	58·0	18	5·3	18	35·9	0·3	
275	,,	,,	5	..		0	19·0	..		0·4	Beginning and end mixed in tremors.
293	,,	,,	14	3	20·1	3	32·7	4	34·7	1·5	
352	,,	August	4–5	22	48·0	22	58·2	0	54·9	6·5	
354	,,	,,	5	10	52·5	10	52·8	11	6·9	0·5	
358	,,	,,	6	..		4	35·9	5	3·1	0·5	Beginning mixed in tremors.
399	,,	,,	28	9	39·1	9	48·5	10	9·1	0·6	
427	,,	September	26	5	14·7	5	18·7	5	25·8	0·8	L at 5^h $17·5^m$.
438	,,	October	3	17	42·9	18	37·6	19	44·2	1·6	
439	,,	,,	3	22	15·0	22	35·1	23	54·0	7·3	Sat 22^h $23·0^m$; L at 22^h $29·9^m$.
444	,,	,,	6	20	4·1	20	21·3	20	41·9	0·4	
447	,,	,,	9	2	45·0	2	47·0	3	17·2	4·4	
450	,,	,,	11	16	21·2	16	28·2	16	42·0	0·3	
465	,,	,,	23	6	28·7	6	55·7	8	29·4	3·1	S at 6^h $36·3^m$.
487	,,	November	4	11	14·2	11	16·2	11	32·3	0·5	
489	,,	,,	4	16	38·7	16	56·9	17	4·1	0·9	
498	,,	,,	10	7	34·8	7	41·0	7	55·2	0·4	
507	,,	,,	18	10	57·1	11	12·7	11	44·2	0·5	
512	,,	,,	22	8	35·3	9	18·7	9	27·4	0·3	
515	,,	,,	24	12	3·7	12	27·2	14	4·7	1·6	
521	,,	,,	28	10	55·4	11	23·5	11	58·4	1·4	

1915.

8	1915	January	5	..		..		16	4·6	..	Linear magnification 1 to 9. Beginning and maximum lost in shifting time.
10	,,	,,	5–6	..		23	58·9	..		1·5	Beginning and end mixed in tremors.
..	,,	,,	13	..		..		..		..	Disturbance lost (room being whitewashed).
58	,,	February	8	11	9·1	11	12·3	11	17·9	0·3	
82	,,	,,	21	..		5	43·1	5	48·5	0·4	Beginning uncertain.
..	,,	,,	21	..		..		..		..	Disturbance lost in shifting time.
93	,,	,,	28	19	7·9	19	30·3	20	31·1	1·5	
101	,,	March	7	21	21·2	..		..		..	Local shock.
104	,,	,,	8	15	49·1	16	12·3	16	34·2	0·5	
115	,,	,,	12	..		15	19·2	15	48·4	1·2	Beginning lost in shifting time.
128	,,	,,	17	19	3·5	19	4·5	19	33·4	0·3	
147	,,	,,	30	..		9	30·9	..		0·3	Beginning and end mixed in tremors.
160	,,	April	3	..		14	1·3	..		0·5	Do.
204	,,	,,	22	19	6·0	19	11·7	19	24·3	0·5	
225	,,	,,	28	3	28·4	3	36·0	3	50·6	0·5	
236	,,	May	1	5	9·7	..		..		..	Traces overlap due to intensity of the disturbance and hence maximum phase cannot be determined. End lost in shifting time.
238	,,	,,	1	..		9	27·8	..		0·4	Beginning and end mixed in tremors.

1915—*continued.*

Observatory number.	Date.			Time of disturbance in G. M. T. Beginning.		maximum.		End.		Amplitude or half the complete ranges of maximum motion.	Remarks.
				H.	M.	H.	M.	H.	M.	mm.	
239	1915 May		2 ..	4	36·4	4	41·2	5	4·4	0·4	
241	,,	,,	3 ..	3	35·7	3	54·9	5	37·9	0·8	
244	,,	,,	5 ..	11	31·7	11	51·9	12	23·8	0·2	
245	,,	,,	5 ..	15	22·3	15	28·2	15	41·3	0·4	Beginning doubtful.
256	,,	,,	12 ..	10	45·7	11	22·3	12	17·7	1·3	
259	,,	,,	14 ..	7	12·8	7	22·3	7	46·2	0·3	
274	,,	,,	21 ..	..		4	44·0	5	17·8	1·7	Beginning mixed in tremors.
296	,,	June	1 ..	..		15	29·0	15	49·7	0·4	Beginning lost in shifting time.
302	,,	,,	3 ..	..		8	18·9	..		0·3	Beginning and end mixed in tremors.
309	,,	,,	6–7 ..	21	49·0	22	53·9	0	5·2	3·9	
337	,,	,,	17–18 ..	23	48·8	0	2·7	0	12·7	0·5	
352	,,	,,	22 ..	4	43·6	4	48·7	5	4·1	0·4	
462	,,	July	31 ..	1	42·6	2	20·0	4	35·7	5·9	
471	,,	August	3 ..	13	8·3	13	47·1	14	24·4	0·5	
484	,,	,,	6 ..	13	32·6	14	0·6	14	45·6	0·6	
492	,,	,,	7 ..	..		15	24·0	16	2·1	0·4	Beginning lost in shifting time.
496	,,	,,	11 ..	..		9	40·1	9	55·4	0·1	Beginning uncertain; maximum doubtful.
498	,,	,,	12 ..	7	44·6	8	7·7	8	39·3	0·5	
499	,,	,,	12 ..	9	22·3	9	30·1	9	58·0	1·5	
503	,,	,,	16 ..	..		1	50·4	2	10·6	0·4	Beginning uncertain.
535	,,	,,	31 ..	20	55·7	21	11·3	21	33·7	0·2	
537	,,	September	1 ..	..		1	15·5	..		0·7	Beginning and end mixed in tremors.
554	,,	,,	7 ..	1	40·8	2	50·9	4	29·7	2·6	S at 1^h $55·0^m$.
561	,,	,,	12 ..	..		0	17·7	0	38·8	0·2	Beginning uncertain.
570	,,	,,	23 ..	8	24·4	8	27·0	8	49·7	0·2	
582	,,	October	3 ..	7	15·4	8	4·4	9	38·4	2·3	
610	,,	November	1 ..	7	34·5	8	5·3	..		3·0	End mixed in the beginning of the following disturbance.
611	,,	,,	1 ..	..		9	43·0	10	31·9	0·7	Beginning mixed in the end of the preceding disturbance.
626	,,	,,	18 ..	4	19·9	4	45·7	5	8·0	0·6	
627	,,	,,	18 ..	..		20	50·2	21	8·2	0·5	Beginning uncertain.
630	,,	,,	21 ..	1	13·7	1	32·9	2	14·2	0·5	
636	,,	,,	30 ..	20	8·1	20	9·8	20	13·4	0·3	
640	,,	December	3 ..	..		2	52·3	..		4·5	Beginning and end mixed in tremors.
654	,,	,,	17 ..	7	14·7	7	20·2	7	41·3	0·7	
659	,,	,,	19 ..	20	22·2	20	31·8	20	47·7	0·5	

TABLE IIa.—*List of principal Disturbances registered by Colaba (E.—W.) Seismograph at Bombay (1911—1915).*

Observatory number.	Date.	Time of Disturbance in G. M. T. Beginning.	Time of Disturbance in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		H. M.	H. M.	Mm.		Linear magnification 1 to 8.
1	1911 January 1 ..	10 21·8	10 29·5	7·1	0″·26	
2	„ „ 1 ..	15 7·8	15 10·7	1·4	0″·26	
3	„ „ 2–3 ..	..	..	..	..	Disturbance lost owing to the smoked paper being destroyed.
4	„ „ 2–3 ..	7 47·5	..	..	0″·22	Maximum not well marked.
5	„ „ 2–3 ..	23 31·0	Boom stopped by thread guards.	>53·0	0″·22	L at $23^h \cdot 35 \cdot 4^m$.
6	„ „ 4 ..	9 47·0	..	..	0″·20	Maximum not well marked.
7	„ „ 7 ..	2 25·6	..	..	0″·20	Do. do.
8	„ „ 14 ..	18 4·0	..	..	0″·23	Do. do.
9	„ „ 16 ..	..	..	..	..	Movements very small.
10	„ February 18 ..	18 45·4	18 51·9	9·9	0″·23	L at $18^h \cdot 51 \cdot 2^m$.
11	„ „ 23 ..	11 30·5	..	..	0″·20	Maximum not well marked.
12	„ April 7 ..	..	..	..	..	Movements very small.
13	„ „ 18 ..	18 18·8	18 27·4	8·5	0″·20	L at $18^h \cdot 25 \cdot 8^m$.
14	„ „ 29 ..	5 33·2	..	..	0″·19	Maximum not well marked.
15	„ May 4 ..	13 42·3	..	..	0″·19	Do. do.
16	„ „ 4–5 ..	23 48·0	0 22·1	2·3	0″·19	
17	„ „ 11 ..	·4 24·0	..	..	0″·18	Maximum not well marked.
18	„ June 7 ..	11 23·8	12 28·7	5·6	0″·17	
19	„ „ 8 ..	0 9·7	0 17·9	0·4	0″·17	
20	„ „ 15 ..	14 34·8	14 52·9	11·0	0″·22	
21	„ „ 17 ..	..	..	..	..	Movements very small.
22	„ July 4 ..	13 37·3	13 43·2	3·9	0″·20	
23	„ „ 5 ..	2 20·4	2 23·9	0·7	0″·20	
24	„ „ 5 ..	18 50·2	..	..	0″·19	Maximum not well marked.
25	„ „ 12 ..	4 15·6	4 38·4	11·6	0″·20	
26	„ „ 19 ..	..	..	..	..	Movements very small.
27	„ August 16 ..	22 52·4	23 17·7	2·0	0″·23	
28	„ „ 16 ..	..	..	..	..	Movements very small.
29	„ „ 18 ..	..	..	..	..	Do. do.
30	„ „ 21 ..	16 55·4	..	..	0″·27	Maximum not well marked.
31	„ „ 23 ..	16 56·4	..	..	0″·30	Do. do.
32	„ September 6 ..	..	..	..	..	Movements very small.
33	„ „ 8 ..	23 22·1	..	..	0″·32	Maximum not well marked.
34	„ „ 15 ..	13 33·2	14 29·4	0·9	0″·24	
35	„ „ 17 ..	..	4 16·0	1·9	0″·24	Commencement lost in shifting time.
36	„ „ 22 ..	..	..	..	..	Movements very small.
37	„ „ 26 ..	14 18·1	14 24·8	0·3	0″·24	
38	„ October 13 ..	3 11·2	..	..	0″·27	Maximum not well marked.
39	„ „ 14 ..	..	..	..	..	Beginning lost in shifting time; maximum uncertain.
40	„ „ 14 ..	13 2·8	..	..	0″·28	Maximum uncertain.
41	„ „ 14 ..	23 29·6	23 31·7	6·7	0″·28	
42	„ „ 15 ..	12 28·0	..	..	0″·27	Maximum not well marked.
43	„ „ 17 ..	..	..	..	..	Movements very small.
44	„ November 13 ..	..	..	..	0″·23	Beginning uncertain; maximum not well marked; S at $16^h \cdot 54 \cdot 1^m$.
45	„ December 11 ..	11 10·5	..	..	0″·19	Maximum not well marked.
46	„ „ 13 ..	..	..	..	..	Movements very small.
47	„ „ 16 ..	..	..	..	..	Beginning uncertain; maximum not well marked.

The record in the case of this instrument was taken on smoked paper from 1st January to 5th October 1911, from 1st August to 5th December 1912, and from 22nd July to 31st December 1915. It was taken with pen and ink from 6th October 1911 to 22nd April 1912 and from 11th December 1912 to 21st July 1915.

1912.

Observatory number	Date.	Time of Disturbance in G. M. T. Beginning.	Time of Disturbance in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		H. m.	H. m.	Mm.		Linear magnification 1 to 8.
1	1912 January 4 ..	..	16 40·5	0·2	0″·20	Beginning uncertain.
		..	..	..	..	Movements very small.
2	„ „ 26 ..	..	13 40·2	0·9	0″·22	Beginning uncertain.
3	„ August 6 ..	1 37·5	1 58·9	30·4	0″·36	
4	„ „ 9 ..	19 21·3	19 34·3	3·2	0″·41	
5	„ „ 17 ..	14 6·4	14 11·3	0·7	0″·57	
6	„ „ 23 ..	21 45·5	21 48·9	0·5	0″·57	
7	„ „ 23 ..	..	..	..	..	Movements very small.
8	„ September 1 ..	0 58·1	1 3·6	0·9	0″·71	
9	„ „ 11 ..	23 46·1	0 0·5	0·4	0″·52	
10	„ „ 13–14 ..	..	..	..	..	Disturbance lost as the papers were destroyed.
11	„ „ 26 ..	21 1·8	22 27·2	0·7	0″·57	
12	„ „ 29 ..	..	..	..	..	Commencement doubtful; maximum not well marked.
13	„ „ 30 ..	..	..	..	..	Do. do.
14	„ October 12 ..	12 17·2	12 40·3	0·7	0″·71	
15	„ „ 18 ..	17 42·8	..	..	0″·71	Maximum not well marked.
16	„ „ 31 ..	8 4·2	8 40·1	1·4	0″·71	
17	„ November 7 ..	21 2·2	..	..	0″·71	Maximum not well marked.
18	„ „ 28 ..	..	..	..	0″·71	Disturbance lost as the instrument was under adjustment.
19	„ December 9 ..	..	0 29·7	0·2	0″·47	Commencement not well marked.
20	„ „ 23–24 ..	..	..	..	..	Movements very small.
21	„ „ 24 ..	..	..	..	..	Do. do.
22	„ „ 28 ..					

1913.

						Linear magnification 1 to 8.
1	1913 January 7 ..	..	..	..	..	Movements very small.
2	„ „ 11 ..	13 26·2	..	..	0″·47	Maximum not well marked.
3	„ „ 19 ..	17 10·5	17 17·9	8·0	0″·57	S at $17^h \cdot 14 \cdot 5^m$; L at $17^h \cdot 16 \cdot 9^m$.
4	„ February 20 ..	..	..	..	..	Movements very small.
5	„ March 14 ..	8 53·2	9 7·4	5·4	0″·36	S at $9^h \cdot 1 \cdot 0^m$.
6	„ „ 23 ..	..	..	..	..	Movements very small.
7	„ „ 27 ..	..	..	..	..	Do. do.
8	„ „ 31 ..	4 4·5	4 34·4	0·5	0″·38	
9	„ April 13 ..	..	..	..	..	Beginning uncertain; maximum not well marked.
10	„ „ 14 ..	..	..	..	..	Movements very small.
11	„ „ 18 ..	..	..	..	..	Do. do.
12	„ „ 18 ..	..	..	..	..	Beginning uncertain; maximum not well marked.
13	„ „ 24 ..	..	..	..	..	Do. do.
14	„ „ 24 ..	..	..	..	..	Do. do.
15	„ „ 25 ..	18 6·0	18 32·8	0·8	0″·57	
16	„ „ 26 ..	..	..	..	..	Movements very small.
17	„ „ 30 ..	..	12 31·9	0·2	0″·44	Beginning uncertain.
18	„ May 16 ..	..	..	..	..	Movements very small.
19	„ „ 18 ..	..	2 46·3	0·2	0″·47	Beginning uncertain.
20	„ „ 25 ..	..	..	..	..	Movements very small.

The instrument was dismounted from 22nd April to 1st August 1912 as the old room in which the instrument was located was demolished and a new one was being constructed in its place during the period.

1913—*continued.*

Observatory number.	Date.	Time of Disturbance in G. M. T. Beginning.	Time of Disturbance in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		H. m.	H. m.	Mm.		
21	1913 May 30 ..	12 9·9	12 31·2	0·4	0″·36	
22	„ June 14 ..	9 48·6	..	..	0″·36	Maximum uncertain.
23	„ „ 22 ..	..	14 43·4	0·3	0″·44	Beginning uncertain.
24	„ „ 26 ..	5 16.8	6 4·1	1·5	0″·47	
25	„ July 12 ..	..	..	..	..	Movements very small.
26	„ August 1 ..	..	17 55·2	0·7	0″·23	Beginning not well marked.
27	„ „ 6 ..	22 34·3	23 39·5	2·7	0″·25	
28	„ „ 13 ..	4 33·4	4 47·9	0·4	0″·21	
29	„ September 3 ..	21 14·0	..	..	0″·18	Maximum not well marked.
30	„ „ 16 ..	12 17·3	..	..	0″·18	Do. do.
31	„ October 2 ..	..	..	..	..	Movements very small.
32	„ „ 11 ..	..	..	..	..	Do. do.
33	„ „ 11 ..	..	9 49·5	0·2	0″·24	Beginning uncertain.
34	„ „ 14 ..	8 32·3	8 58·8	0·5	0″·23	
35	„ „ 29 ..	4 45·8	4 52·4	0·2	0″·19	
36	„ November 10 ..	..	..	..	..	Movements very small.
37	„ „ 14 ..	..	..	..	..	Do. do.
38	„ „ 19 ..	..	..	..	..	Lost owing to stoppage of clock.
39	„ „ 23 ..	..	..	..	..	Movements very small.
40	„ December 21 ..	15 48·4	15 56·9	0·5	0″·19	

1914.

						Linear magnification 1 to 8.
1	1914 January 12 ..	..	..	..	..	Movements very small.
2	„ „ 20 ..	..	..	..	..	Do. do.
3	„ „ 30 ..	3 55·8	4 55·7	0·7	0″·20	
4	„ „ 30 ..	..	..	..	..	Movements very small.
5	„ February 6 ..	..	11 50·2	0·4	0″·20	Beginning uncertain.
6	„ „ 22 ..	..	..	..	..	Movements very small.
7	„ „ 26 ..	..	6 21·8	0·3	0″·20	Beginning uncertain.
8	„ March 6 ..	..	..	..	..	Movements very small.
9	„ „ 14 ..	..	..	..	..	Do. do.
10	„ „ 18 ..	..	..	..	..	Beginning uncertain; maximum not well marked.
11	„ „ „ ..	..	..	..	..	Movements very small.
12	„ „ 27 ..	..	..	..		Do. do.
13	„ „ 28 ..	10 49·9	11 0·3	0·4	0″·20	
14	„ „ 30 ..	..	..	..	..	Movements very small.
15	„ April 11 ..	16 56·9	17 18·0	0·2	0″·22	
16	„ „ 20 ..	..	..	..	..	Beginning uncertain; maximum not well marked.
17	„ „ 30 ..	..	..	..	..	Movements very small.
18	„ May 1 ..	..	..	..	..	Do. do.
19	„ „ 21 ..	8 33·3	8 38·5	0·3	0″·20	
20	„ „ 26 ..	14 33·1	15 2·5	30·9	0″·20	S at $14^h \cdot 42 \cdot 3^m$.
21	„ „ 29 ..	4 58·7	5 1·8	1·3	0″·20	
22	„ June 20 ..	..	..	..	..	Movements very small.
23	„ „ 25 ..	19 14·6	19 30·3	6·9	0″·25	
24	„ July 14 ..	..	3 31·1	0·3	0″·27	Commencement uncertain.
25	„ August 4 ..	..	22 57·9	3·9	0″·36	Beginning cannot be determined owing to faint record.
26	„ „ 5 ..	10 52·0	10 52·2	0·1	0″·32	
27	„ „ 6 ..	4 26·2	..	..	0″·32	Maximum not well marked.

1914—*continued.*

Observatory number.	Date.	Time of Disturbance in G. M T. Beginning.	Time of Disturbance in G. M T. Maximum.	Amplitude or half the complete range of maximum motion.	Sensibilty to tilt value of 1 mm.	Remarks.
		H. m.	H. m.	Mm.		
28	1914 September 26 ..	..	..	..	..	Movements very small.
29	„ October 3 ..	..	18 37·5	0·1	0″·30	Beginning uncertain.
30	„ „ 3 ..	22 18·9	22 33·8	4·1	0″·30	S at. $22^h \cdot 21 \cdot 2^m$; L at $22^h \cdot 30 \cdot 2^m$.
31	„ „ 9 ..	2 45·1	2 47·3	..	0″·32	Maximum doubtful; amplitude cannot be determined owing to loss of record.
32	„ „ 11 ..	16 21·7	16 25·6	0·2	0″·28	
33	„ „ 23 ..	..	6 48·3	0·9	0″·27	Beginning lost in shifting time, maximum doubtful.
34	„ November 4 ..	11 13·8	11 16·3	0·1	0″·27	
35	„ „ 24 ..	12 3·5	..	..	0″·25	Maximum not well marked.
36	„ „ 28 ..	..	..	..	..	S at $12^h \cdot 12 \cdot 0^m$. Movements very small.

1915.

						Linear magnification 1 to 8.
1	1915 January 5 ..	..	..	..	..	Movements very small.
2	„ „ 5 ..	23 34·8	..	..	0″·26	Maximum not well marked.
3	„ „ 13 ..	..	..	..	..	Movements very small.
4	„ February 21 ..	15 1·4	..	..	0″·25	Maximum not well marked.
5	„ „ 28 ..	..	..	..	..	Movements very small.
6	„ March 3 ..	1 49·9	..	..	0″·28	Maximum not well marked.
7	„ „ 7 ..	21 21·2	..	..	0″·28	Local shock.
8	„ „ 12 ..	..	..	..	..	Movements very small.
9	„ „ 17 ..	19 3·5	..	..	0″·28	Maximum not well marked.
10	„ April 3 ..	..	..	..	..	Movements very small.
11	„ „ 22 ..	..	..	..	..	Do. do.
12	„ „ 28 ..	..	..	..	..	Beginning and maximum not well marked.
13	„ „ 30 ..	2 3·4	..	..	0″·27	Maximum not well marked.
14	„ May 1 ..	5 11·4	5 44·8	59·0	0″·26	S at $5^h \cdot 20 \cdot 7^m$; L at $5^h \cdot 38 \cdot 7^m$.
15	„ „ 1 ..	..	..	..	..	Movements very small.
16	„ „ 2 ..	..	..	..	..	Do. do.
17	„ „ 3 ..	..	..	..	..	Do. do.
18	„ „ 5 ..	..	..	..	..	Do. do.
19	„ „ 12 ..	..	..	..	..	Do. do.
20	„ „ 21 ..	..	..	..	..	Do. do.
21	„ June 6 ..	21 52·4	22 55·7	0·3	0″·27	
22	„ August 3 ..	..	..	..	..	Beginning uncertain; maximum not well marked.
23	„ „ 6 ..	..	..	..	..	Movements very small.
24	„ „ 7 ..	..	15 24·3	0·1	0″·11	Beginning uncertain.
25	„ „ 11 ..	..	..	..	..	Movements very small.
26	„ „ 12 ..	..	8 5·8	0·4	0″·11	Beginning uncertain.
27	„ „ 12 ..	9 21·8	9 28·7	0·6	0″·11	
28	„ „ 16 ..	..	1 49·0	0·2	0″·10	Beginning uncertain.
29	„ „ 31 ..	..	..	..	...	Movements very small
30	„ September 1 ..	..	1 15·5	0·1	0″·10	Beginning uncertain.
31	„ „ 1 ..	..	..	..	..	Movements very small.
32	„ „ 7 ..	1 40·6	2 37·6	4·7	0″·10	
33	„ „ 12 ..	..	..	..	..	Movements very small.
34	„ „ 23 ..	..	..	..	..	Do. do.
35	„ October 3 ..	7 12·7	7 56·2	3·9	0″·10	
36	„ November 1 ..	7 33·8	8 2·8	1·3	0″·09	

1915—*continued.*

Observatory number.	Date.	Time of disturbance in G. M. T.		Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		Beginning	Maximum.			
		H. m.	H. m.	Mm.		
37	1915 November 1 ..	..	9 37·7	0·3	0″·09	Beginning mixed with the end of the previous disturbance.
38	„ „ 18 ..	..	..	..	..	Beginning uncertain ; maximum not well marked.
39	„ „ 18 ..	..	..	..	..	Movements very small.
40	„ „ 21 ..	..	1 26·6	0·2	0″·09	Beginning uncertain.
41	„ „ 30 ..	20 8·3	..	..	0″·09	Maximum not well marked.
42	„ December 3 ..	2 44·3	2 52·1	3·5	0″·08	
43	„ „ 17 ..	7 14·4	7 19·6	0·4	0″·08	
44	„ „ 17 ..	..	..	..	..	Movements very small.
45	„ „ 19 ..	..	..	..	..	Do. do.
46	„ „ 31 ..	..	..	..	..	Do. do.

TABLE IIb.—*List of principal Disturbances registered by Colaba (N.—S.) Seismograph at Bomay (1911—1915).*

Observatory number.	Date.	Time of Disturbance in G. M. T. Beginning.	Time of Disturbance in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		H. m.	H. m.	Mm.		Linear magnification 1 to 7·5.
1	1911 January 1 ..	10 22·7	10 29·9	3·4	0″·09	
2	„ „ 1 ..	15 9·2	15 11·2	0·4	0″·09	
3	„ „ 2–3 ..	..	..	..	..	Disturbance lost owing to the smoked paper being destroyed.
4	„ „ 2–3 ..	23 31·1	Boom stopped by thread guards.	>57·0	0″·09	L at 23^h $35·5^m$;
5	„ „ 4 ..	9 46·2	..	..	0″·09	Maximum not well marked.
6	„ „ 7 ..	..	..	..	..	Movements very small.
7	„ „ 16 ..	..	..	..	..	Do. do.
8	„ February 18 ..	18 45·1	18 52·6	7·0	0″·09	L at $18^h·51·4^m$;
9	„ „ 23 ..	11 30·7	..	..	0″·09	Maximum not well marked.
10	„ April 7 ..	..	..	..	..	Movements very small.
11	„ „ 18 ..	18 18·1	18 25·0	12·2	0″·09	L at $18^h·23·7^m$.
12	„ „ 29 ..	..	..	..	..	Movements very small.
13	„ May 4 ..	13 42·1	..	..	0″·09	Maximum not well marked.
14	„ „ 4–5 ..	23 48·6	0 19·0	2·1	0″·09	
15	„ „ 11 ..	4 26·1	..	..	0″·09	Maximum not well marked.
16	„ June 7 ..	11 22·3	12 27·2	5·1	0″·09	
17	„ „ 8 ..	0 9·7	0 20·4	0·9	0″·09	
18	„ „ 15 ..	14 34·9	14 54·7	39·7	0″·09	
19	„ „ 17 ..	..	..	..	..	Movements very small.
20	„ July 4 ..	13 36·6	13 43·3	6·5	0″·09	
21	„ „ 5 ..	2 20·9	..	..	0″·09	Maximum not well marked.
22	„ „ 5 ..	18 55·7	..	..	0″·09	Do. do.
23	„ „ 12 ..	4 17·0	4 36·7	11·1	0″·09	
24	„ „ 19 ..	..	..	..	..	Movements very small.
25	„ August 16 ..	22 52·4	23 14·0	2·8	0″·09	
26	„ „ 17 ..	..	..	..	..	Movements very small.
27	„ „ 21 ..	16 55·7	..	..	0″·09	Maximum not well marked.
28	„ „ 23 ..	..	..	..	..	Movements very small.
29	„ September 6 ..	..	..	..	..	Do. do.
30	„ „ 8 ..	23 20·9	..	..	0″·09	Maximum not well marked.
31	„ „ 15 ..	..	..	..	..	Commencement not well marked. Maximum uncertain.
32	„ „ 17 ..	..	..	..	..	Disturbance lost in shifting time.
33	„ „ 22 ..	..	..	..	..	Beginning and maximum uncertain.
34	„ „ 26 ..	..	..	..	..	Do. do.
35	„ October 13 ..	3 11·1	3 19·1	0·2	0″·11	
36	„ „ 14 ..	..	..	..	..	Disturbance lost in shifting time.
37	„ „ 14 ..	13 2·8	..	..	0″·10	Maximum uncertain.
38	„ „ 14 ..	23 29·5	23 31·5	2·0	0″·10	
39	„ November 13 ..	..	..	..	..	Movements very small.
40	„ December 11 ..	..	..	..	..	Do. do.
41	„ „ 16 ..	..	20 44·2	0·5	0″0·8	Beginning uncertain.

The record in the case of this instrument was taken on smoked paper from 1st January to 5th October 1911, from 3rd August 1912 to 12th January 1913, and from 31st July to 31st December 1915. It was taken with pen and ink from 6th October 1911 to 22nd April 1912 and from 14th January 1913 to 30th July 1915.

1912.

Observatory number.	Date.	Time of disturbance in G. M. T. Beginning.	Time of disturbance in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		H. m.	H. m.	Mm.		Linear magnification 1 to 7·5.
1	1912 January 4 ..	..	..	..	..	Movements very small.
2	„ „ 26 ..	..	..	..	..	Do. do.
3	„ August 6 ..	..	..	..	..	Beginning uncertain ; maximum not well marked.
4	„ „ 9 ..	1 37·8	1 58·1	24·5	0″·22	
5	„ „ 17 ..	..	19 37·6	2·8	0″·17	Beginning not well marked.
6	„ „ 23 ..	..	..	..	..	Traces intermingled owing to shift of zero.
7	„ „ 23 ..	21 45·5	21 49·0	0·3	0″·24	
8	„ „ 31 ..	..	..	..	..	Movements very small.
9	„ September 11 ..	0 58·0	1 1·5	0·5	0″·21	
10	„ „ 13 ..	23 46·1	23 58·2	0·2	0″·21	
11	„ „ 26 ..	..	..	..	..	Disturbance lost as the papers were destroyed.
12	„ „ 29 ..	..	21 22·5	0·4	0″·34	Beginning doubtful.
13	„ October 12 ..	..	..	..	..	Movements very small.
14	„ „ 18 ..	..	12 39·6	0·3	0″·31	Beginning uncertain.
15	„ „ 31 ..	..	..	..	..	Movements very small.
16	„ November 7 ..	8 4·0	8 40·4	1·2	0″·39	
17	„ „ 28 ..	21 2·0	..	..	0″·31	Maximum not well marked.
18	„ December 9 ..	..	0 29·4	0·1	0″·34	Beginning not well marked.
19	„ „ 9 ..	..	..	..	..	Disturbance lost as the papers were destroyed.
20	„ „ 24 ..	..	..	..	..	Beginning uncertain ; maximum not well marked.
21	„ „ 24 ..	..	18 33·9	0·1	0″·31	Beginning uncertain.
22	„ „ 28 ..	..	..	..	..	Movements very small.

1913.

						Linear magnificaion 1 to 7·5.
1	1913 January 8 ..	..	..	..	..	Movements very stmall.
2	„ „ 11 ..	..	..	..	..	Traces intermingled owing to shift of zero.
3	„ „ 19 ..	17 10·7	17 17·8	1·1	0″·31	S at $17^h \cdot 14 \cdot 4^m$; L at $17^h \cdot 16 \cdot 7^m$.
4	„ February 20 ..	..	..	..	..	Movements very small.
5	„ March 6 ..	2 11·8	2 16·8	0·3	..	
6	„ „ 6 ..	11 9·6	..	..	..	Maximum not well marked.
7	„ „ 10 ..	..	..	..	..	Movements very small.
8	„ April 13 ..	..	..	..	..	Beginning uncertain ; maximum not well marked.
9	„ „ 18 ..	..	..	..	..	Movements very small.
10	„ „ 24 ..	..	..	..	..	Do. do.
11	„ „ 25 ..	18 6·0	18 29·8	0·4	0″·62	
12	„ „ 30 ..	..	12 29·6	0·2	0″·52	Beginning uncertain.
13	„ May 16 ..	..	..	..	..	Movements very small.
14	„ „ 18 ..	..	..	..	..	Do. do.
15	„ „ 29 ..	..	..	..	..	Do. do.
16	„ „ 30 ..	12 9·6	12 29·9	0·6	0″·31	
17	„ June 14 ..	9 48·5	10 2·9	0·2	0″·34	
18	„ „ 22 ..	..	14 42·4	0·2	0″·31	Beginning uncertain.
19	„ „ 26 ..	..	6 0·2	1·1	0″·52	Do. do.

The instrument was dismounted from 22nd April to 1st August 1912 as the old room in which the instrument was located was demolished and a new one was being constructed in its place during the period.

1913—*continued.*

Observatory number.	Date.	Time of disturbance in G. M. T. Beginning.	Time of disturbance in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		H. m.	H. m.	Mm.		
20	1913 August 1 ..	17 22·3	17 54·9	0·5	0″·17	
21	„ „ 13 ..	..	4 48·9	0·6	0″·18	Beginning uncertain.
22	„ September 3 ..	21 14·2	..	..	0″·15	Maximum not well marked.
23	„ „ 16 ..	..	..	..	..	Movements very small.
24	„ October 2 ..	..	..	..	..	Do. do.
25	„ „ 11 ..	..	..	..	..	Do. do.
26	„ „ 11 ..	..	9 50·1	0·2	0″·34	Beginning uncertain.
27	„ „ 14 ..	8 32·8	8 58·9	0·2	0″·17	
28	„ „ 29 ..	4 45·5	..	..	0″·18	Maximum not well marked.
29	„ November 14 ..	..	..	..	..	Movements very small.
30	„ „ 19 ..	3 31·5	..	..	0″·16	Maximum not well marked.
31	„ „ 23 ..	..	..	..	..	Movements very small.
32	„ December 2 ..	..	..	..	..	Do. do.
33	„ „ 21 ..	15 49·0	15 54·7	1·6	0″·16	

1914.

						Linear magnification 1 to 7·5.
1	1914 January 12 ..	..	..	..	..	Movements very small.
2	„ „ 20 ..	..	..	..	..	Traces intermingled owing to shift of zero.
3	„ „ 30 ..	3 54·6	4 59·6	0·8	0″·21	
4	„ „ 30 ..	..	..	..	..	Movements very small.
5	„ February 6 ..	..	..	..	..	Do. do.
6	„ „ 26 ..	..	..	..	..	Do. do.
7	„ March 6 ..	..	..	..	..	Do. do.
8	„ „ 14 ..	20 10·5	20 37·2	0·2	0″·17	
9	„ „ 18 ..	..	..	..	..	Beginning uncertain ; maximum not well marked.
10	„ „ 18 ..	..	7 5·0	0·1	0″·24	Beginning uncertain.
11	„ „ 27 ..	..	..	..	..	Movements very small.
12	„ „ 28 ..	10 53·9	10 58·3	1·0	0″·31	
13	„ „ 30 ..	..	..	..	..	Beginning uncertain ; maximum not well marked.
14	„ April 11 ..	..	17 33·3	0·2	0″·24	Beginning uncertain.
15	„ „ 20 ..	..	..	..	..	Beginning uncertain ; maximum not well marked.
16	„ „ 30 ..	..	..	..	..	Movements very small.
17	„ May 1 ..	..	..	..	..	Do. do.
18	„ „ 21 ..	8 33·3	...	..	0″·22	Maximum not well marked.
19	„ „ 26 ..	..	14 59·0	16·3	0″·24	S at 14^h·42·5^m; Beginning uncertain
20	„ „ 29 ..	4 58·6	5 1·5	1·1	0″·24	
21	„ June 20 ..	..	7 29·0	0·2	0″·26	Beginning uncertain.
22	„ „ 25 ..	19 14·6	19 28·7	9·0	0″·18	
23	„ July 14 ..	..	..	..	..	Beginning uncertain ; maximum not well marked.
24	„ August 4 ..	22 52·4	23 0·0	3·5	0″·24	
25	„ „ 5 ..	..	..	..	..	Movements very small.
26	„ „ 6 ..	4 26·3	..	..	0″·31	Maximum not well marked.
27	„ September 26 ..	..	..	..	..	Movements very small.
28	„ October 3 ..	..	18 36·7	0·1	0″·26	Beginning uncertain.
29	„ „ 3 ..	..	22 39·5	1·6	0″·26	Beginning uncertain ; S at 22^h·21·2
30	„ „ 9 ..	2 45·4	2 47·1	5·8	0″·26	
31	„ „ 9 ..	..	..	..	..	Movements very small.

1914—*continued.*

Observatory number.	Date.	Time of Disturbance in G. M. T. Beginning.	Time of Disturbance in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		H. m.	H. m.	Mm.		
32	1914 October 11 ..	16 21·5	16 25·9	0·2	0″·22	
33	„ „ 23 ..	..	..	..	..	Disturbance lost in shifting time.
34	„ November 4 ..	11 14·3	11 16·0	0·1	0″·18	
35	„ „ 24 ..	12 3·9	..	..	0″·26	S at 12h 12·2m; maximum not well marked.
36	„ „ 28 ..	..	..	..	..	Movements very small.
37	„ December 15 ..	..	..	..	..	Do. do.

1915.

						Linear magnification 1 to 7·5.
1	1915 January 5 ..	..	..	..	..	Movements very small.
2	„ „ 5 ..	23 35·0	23 46·6	0·5	0″·34	L at 23h·41·5m.
3	„ „ 13 ..	..	..	..	..	Movements very small.
4	„ February 8 ..	..	..	..	..	Do. do.
5	„ „ 21 ..	15 1·2	..	..	0″·19	Maximum not well marked.
6	„ „ 28 ..	19 14·3	19 27·6	0·3	0″·21	
7	„ March 3 ..	..	..	..	..	Movements very small.
8	„ „ 7 ..	21 21·2	..	..	0″·26	Local shock.
9	„ April 22 ..	..	..	..	..	Movements very small.
10	„ „ 28 ..	..	..	..	..	Beginning and maximum not well marked.
11	„ „ 30 ..	2 1·6	..	..	0″·24	Maximum not well marked.
12	„ May 1 ..	5 11·5	Curve passed out of range of paper		0″·22	S at 5h·20·8m; L at 5h·38·5m; Maximum lost.
13	„ „ 1 ..	..	..	..	..	Movements very small.
14	„ „ 2 ..	..	..	..	..	Do. do.
15	„ „ 3 ..	..	..	..	..	Do. do.
16	„ „ 5 ..	..	..	..	..	Do. do.
17	„ „ 12 ..	..	..	..	..	Do. do.
18	„ „ 21 ..	..	..	..	..	Do. do.
19	„ June 6 ..	21 52·4	22 55·1	0·4	0″·17	
20	„ „ 22 ..	4 44·8	..	..	0″·21	Maximum not well marked.
21	„ July 31 ..	..	2 15·3	1·5	0″·26	S at 1h·52·7m. Beginning uncertain.
22	„ August 3 ..	..	..	..	..	Beginning uncertain; maximum not well marked.
23	„ „ 6 ..	..	..	..	..	Do. do.
24	„ „ 7 ..	..	..	..	..	Do. do.
25	„ „ 11 ..	..	..	..	..	Movements very small.
26	„ „ 12 ..	..	..	..	..	Beginning uncertain; maximum not well marked.
27	„ „ 12 ..	..	9 27·9	1·7	0″·16	Beginning uncertain.
28	„ „ 16 ..	..	1 50·2	0·2	0″·15	Do. do.
29	„ „ 31 ..	..	..	..	..	Movements very small.
30	„ September 1 ..	..	1 14·8	0·1	0″·15	Beginning uncertain.
31	„ „ 1 ..	..	..	..	..	Movements very small.
32	„ „ 7 ..	1 40·5	2 41·9	11·8	0″·15	
33	„ „ 12 ..	..	..	..	..	Movements very small.
34	„ „ 23 ..	..	..	..	..	Do. do.
35	„ October 3 ..	7 13·4	8 3·3	1·7	0″·17	
36	„ November 1 ..	7 34·3	8 2·5	1·7	0″·16	

1915—*continued.*

Observatory number.	Date.	Time of disturbance in G. M. T.		Amplitude or half the complete range of maximum motion.	Sensibility to tilt value of 1 mm.	Remarks.
		Beginning.	Maximum.			
		H. m.	H. m.	Mm.		
37	1915 November 1 ..	..	..	..	..	Beginning mixed in the end of the previous disturbance; maximum not well marked.
38	„ „ 18 ..	4 21·4	4 42·7	0·5	0″·31	
39	„ „ 18 ..	..	..	..	..	Movements very small.
40	„ „ 21 ..	..	1 33·5	0·4	0″·16	Beginning uncertain.
41	„ „ 30 ..	..	..	..	..	Movements very small.
42	„ December 3 ..	2 44·2	2 50·6	6·6	0″·15	
43	„ „ 17 ..	7 10·2	7 19·8	0·7	0″·16	Beginning doubtful.
44	„ „ 17 ..	..	..	..	..	Movements very small.
45	„ „ 19 ..	..	20 30·0	0·2	0″·15	Beginning not well marked.
46	„ „ 30 ..	..	..	..	..	Movements very small.
47	„ „ 31 ..	..	..	..	..	Do. do.

TABLE III—*List of principal Disturbances registered by Omori-Ewing Seismograph.*

1911.

Observatory number.	Date.	Time of Disturbances in G. M. T. Beginning.	Time of Disturbances in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. m.	H. m.	Mm.	Magnification 1 to 20.
1	1911 January 1 ..	10 22·2	10 31·0	37·3	
2	„ „ 1 ..	15 3·9	15 10·9	2·1	
3	„ „ 2–3 ..	..	..	..	Disturbance lost owing to the smoked papers being destroyed.
4	„ „ 3 ..	23 30·8	Boom stopped by thread guards.	>70·0	L at $23^h \cdot 35 \cdot 0^m$.
5	„ „ 4 ..	9 46·4	9 50·2	1·9	
6	„ „ 7 ..	2 25·3	..	..	Maximum not well marked.
7	„ „ 14 ..	18 4·3	..	...	Do. do.
8	„ „ 16 ..	9 9·0	..	..	Do. do.
9	„ February 18 ..	18 45·2	18 52·9	42·4	L at $18^h \cdot 50 \cdot 8^m$.
10	„ „ 23 ..	11 30·5	..	..	Maximum not well marked.
11	„ April 18 ..	18 18·4	18 27·3	>56·5	L at $18^h \cdot 24 \cdot 8^m$.
12	„ „ 29 ..	5 33·4?	..	..	Maximum not well marked.
13	„ May 4 ..	13 42·7	..	..	Do. do.
14	„ „ 4 ..	23 48·4	..	..	Do. do.
15	„ June 7 ..	11 22·4	12 35·1	20·0	
16	„ „ 8 ..	..	..	..	Movements very small.
17	„ „ 15 ..	14 34·9	14 43·5	25·5	
18	„ „ 17 ..	..	..	..	Do. do.
19	„ July 4 ..	13 37·3	13 41·6	15·7	
20	„ „ 5 ..	2 19·7	..	...	Maximum uncertain.
21	„ „ 12 ..	4 17·1	4 43·4	21·2	
22	„ „ 19 ..	..	..	..	Movements very small.
23	„ August 16 ..	22 51·8	23 0·8	3·9	
24	„ „ 17 ..	..	..	..	Movements very small.
25	„ „ 21 ..	16 49·4	..	..	Maximum not well marked.
26	„ „ 23 ..	16 56·4	..	..	Do. do.
27	„ September 6 ..	..	..	..	Movements very small.
28	„ „ 8 ..	23 23·7	23 30·7	0·2	
29	„ „ 15 ..	13 29·6	14 31·9	0·4	
30	„ „ 17 ..	3 40·1	4 17·9	6·0	
31	„ „ 26 ..	14 18·3	..	..	Maximum not well marked.
32	„ October 13 ..	3 10·9	3 19·9	3·0	
33	„ „ 14 ..	6 47·9	6 56·2	0·2	
34	„ „ 14 ..	13 2·2	13 12·8	3·6	
35	„ „ 14 ..	23 27·2	23 31·5	49·2	S at $23^h \cdot 29 \cdot 7^m$; L at $23^h \cdot 31 \cdot 4^m$.
36	„ „ 15 ..	12 27·7	12 36·1	0·2	
37	„ „ 17 ..	..	..	..	Movements very small.
38	„ November 13 ..	16 35·8	17 0·9	14·9	S at $16^h \cdot 55 \cdot 1^m$; L at $16^h \cdot 59 \cdot 2^m$.
39	„ „ 30 ..	23 43·2	..	..	Maximum not well marked.
40	„ December 11 ..	11 5·3	11 16·6	1·6	Sat $11^h \cdot 9 \cdot 7^m$; L at $11^h \cdot 12 \cdot 9^m$.
		..	11 31·1	1·5	
41	„ „ 13 ..	9 4·0	..	..	Maximum not well marked.
42	„ „ 16 ..	19 34·1	20 43·4	3·3	
43	„ „ 20 ..	6 13·4	6 45·3	0·6	
44	„ „ 29 ..	16 19·0	..	..	Maximum not well marked.
45	„ „ 31 ..	6 27·5	..	..	Do. do.

1912.

Observatory number.	Date.	Time of disturbance in G. M. T. Beginning.	Time of disturbance in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. m.	H. m.	Mm.	Magnification 1 to 20.
1	1912 January 4 ..	..	16 40·6	1·0	Beginning uncertain.
2	„ „ 26 ..	14 50·5	14 58·5	0·5	
3	„ „ 31 ..	..	..	..	Movements very small.
4	„ March 24 ..	..	..	..	Movements very small.
5	„ April 23 ..	21 50·6	..	..	Maximum not well marked.
6	„ „ 25 ..	10 31·8	..	..	Beginning doubtful; maximum not well marked
7	„ May 6 ..	19 21·3	..	..	Maximum not well marked.
8	„ „ 11 ..	17 32·6	17 42 1	4·8	S at $17^h \cdot 36 \cdot 6^m$; L at $17^h \cdot 40 \cdot 3^m$.
9	„ „ 21 ..	..	..	..	Exact times cannot be determined as time marks have failed.
10	„ „ 22 ..	23 12·2	..	..	Maximum not well marked.
11	„ „ 23 ..	2 28·9	..	..	Maximum lost as the pen was lifted.
12	„ June 7 ..	10 46·3	..	..	Maximum not well marked.
13	„ „ 7 ..	..	..	..	Movements very small.
14	„ „ 7 ..	..	..	..	Do. do.
15	„ „ 7 ..	..	..	..	Do. do.
16	„ „ 8 ..	7 40·4	8 29·2	6·7	
17	„ „ 8 ..	..	..	..	Beginning uncertain; maximum not well marked
18	„ „ 8 ..	..	..	..	Movements very small.
19	„ „ 8 ..	13 48·8	13 52·8	0·4	
20	„ „ 10 ..	..	17 3·2	1·2	Beginning uncertain.
21	„ „ 17 ..	11 58·1	..	..	Maximum not well marked.
22	„ „ 18 ..	12 16·8	..	..	Do. do.
23	„ „ 26 ..	17 2·6	..	..	Do. do.
24	„ July 7 ..	8 21·6	8 53·7	14·8	
25	„ „ 24 ..	12 9·5	12 14·3	0·7	
26	„ „ 24 ..	..	..	..	Movements very small.
27	„ „ 25 ..	23 19·5	..	..	Maximum not well marked.
28	„ August 6 ..	13 32·5	13 40·4	0·2	
29	„ „ 9 ..	1 37·4	..	..	Maximum uncertain owing to shift of zero.
30	„ „ 17 ..	19 21·3	19 33·8	4·2	
31	„ „ 23 ..	14 6·1	14 11·5	3·5	
32	„ „ 23 ..	21 45·6	21 49·0	3·5	
33	„ September 11 ..	..	..	..	Beginning uncertain; maximum not well marked
34	„ „ 13 ..	..	..	..	Movements very small.
35	„ „ 26 ..	..	..	..	Disturbance lost as the papers were destroyed.
36	„ „ 29 ..	21 2·2	..	..	Maximum not well marked.
37	„ October 18 ..	12 17·2	..	..	Do. do.
38	„ November 7 ..	8 4·8	..	..	Do. do.
39	„ „ 28 ..	21 2·1	..	..	Do. do.
40	„ December 9 ..	..	..	..	Disturbance lost as the papers were destroyed.
41	„ „ .....24 ..	..	..	..	Beginning uncertain; maximum not well marked

1913.

					Magnification 1 to 20.
1	1913 January 7 ..	..	..	..	Movements very small.
2	„ „ 11 ..	13 26·2	..	..	Maximum not well marked.
3	„ „ 19 ..	17 10·4	17 17·4 17 18·7	11·2 12·2	S at $17^h \cdot 14 \cdot 1^m$; L at $17^h \cdot 16 \cdot 6^m$.
4	„ February 20 ..	..	..	..	Movements very small.
5	„ March 6 ..	2 12·7	2 17·0	3·8	
6	„ „ „ ..	11 7·4	11 11·6	32·5	
7	„ „ 10 ..	19 16·0	19 16·7	0·4	

1913—*continued.*

Observatory number.	Date.			Time of Disturbances in G. M. T. Beginning.	Time of Disturbances in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Remarks.
				H. m.	H. m.	Mm.	
8	1913 March	14	..	..	..	..	Record faulty.
9	,, ,,	24	..	..	..	..	Movements very small.
10	,, ,,	31	..	4 4·4	4 36·6	0·3	
11	,, April	13	..	..	..	..	Movements very small.
12	,, ,,	25	..	..	..	..	Beginning uncertain; maximum not well marked.
13	,, May	16	..	..	..	..	Movements very small.
14	,, ,,	18	..	..	..	..	Do. do.
15	,, ,,	30	..	12 9·7	..	..	Maximum not well marked.
16	,, June	14	..	9 48·3	..	..	Maximum uncertain.
17	,, ,,	22	..	..	..	..	Movements very small.
18	,, ,,	26	..	5 17·3	6 3·8	1·0	
19	,, July	7	..	17 59·2	..	..	Maximum not well marked.
20	,, ,,	12	..	..	..	..	Movements very small.
21	,, ,,	22	..	..	..	..	Do. do.
22	,, August	1	..	..	17 55·3	0·4	Beginning not well marked.
23	,, ,,	6	..	22 34·3	23 39·7	1·5	
24	,, ,,	13	..	4 33·3	4 47·8	0·4	
25	,, September	3	..	21 14·1	..	..	Maximum not well marked.
26	,, ,,	16	..	..	..	..	Movements very small.
27	,, October	11	..	..	..	..	Do. do.
28	,, ,,	14	..	8 32·4	8 58·6	0·5	
29	,, ,,	29	..	4 45·0	..	..	Maximum not well marked.
30	,, November	19	..	3 31·2	..	..	Do. do.
31	,, ,,	23	..	..	..	..	Movements very small.
32	,, December	2	..	..	..	..	Do. do.
33	,, ,,	21	..	15 48·5	15 57·4	0·8	

1914.

							Magnification 1 to 20.
1	1914 January	20	..	..	12 46·9	0·3	Beginning uncertain.
2	,, ,,	30	..	3 55·6	5 0·6	1·1	
3	,, ,,	30	..	..	..	..	Movements very small.
4	,, February	6	..	11 44·9	11 50·4	0·6	
5	,, ,,	26	..	..	..	..	Beginnin guncertain; maximum not well marked.
6	,, March	6	..	..	..	..	Movements very small.
7	,, ,,	14	..	20 10·4	20 40·6	0·2	
8	,, ,,	18	..	..	5 8·6	0·5	Beginning uncertain.
9	,, ,,	18	..	..	..	..	Movements very small.
10	,, ,,	28	..	10 49·7	11 0·5	1·0	Do. do.
11	,, ,,	30	..	..	..	..	Beginning uncertain; maximum not well marked.
12	,, April	11	..	16 50·9	17 21·7	0·3	
13	,, ,,	20	..	..	..	..	Movements very small.
14	,, ,,	30	..	..	..	..	Do. do.
15	,, May	1	..	..	..	..	Do. do.
16	,, ,,	21	..	8 32·8	8 38·5	0·4	
17	,, ,,	26	..	14 33·6	15 5·4	21·7	S at $14^h \cdot 42 \cdot 6^m$.
18	,, ,,	29	..	4 58·8	5 1·5	1·1	Beginning and maximum doubtful.
19	,, June	20	..	7 38·0	..	..	Maximum not well marked.
20	,, ,,	25	..	19 14·6	19 31·1	39·5	
21	,, July	14	..	..	..	..	Lost in shifting time.
22	,, August	4	..	22 47·9	22 57·9	15·6	
23	,, ,,	5	..	10 46·9	10 52·5	0·1	
24	,, ,,	6	..	4 25·8	4 30·5	0·3	

1914—*continued.*

Observatory number.	Date.	Time of Disturbances in G. M. T. Beginning.	Time of Disturbances in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. m.	H. m.	Mm.	Movements very small.
25	1914 August 28 ..	..	..	..	
26	,, September 26 ...	5 13·1	...	..	Maximum not well marked.
27	,, October 3 ..	..	18 37·6	0·2	Beginning uncertain.
28	,, ,, 3 ..	22 15·0 2 45·1	22 33·9	7·9	S at $22^h 21·4^m$.
29	,, ,, 9 ..	2 42·9	2 47·2	8·8	
30	,, ,, 9 ..	..	..	..	Lost in shifting time.
31	,, ,, 11 ..	..	..	..	Movements very small.
32	,, ,, 11 ..	16 21·6	16 25·6	0·6	
33	,, ,, 23 ..	6 28·4	6 48·2	2·3	S at $6^h 36·0^m$.
34	,, November 4 ..	11 13·7	11 16·3	0·3	
35	,, ,, 18 ...	10 56·6	..	..	Maximum not well marked.
36	,, ,, 24 ..	12 3·8	..	..	S at $12^h 12·2^m$; maximum not well marked.
37	,, ,, 28 ..	..	..	..	Movements very small.
38	,, December 15 ..	..	..	..	Movements very small.

1915.

					Magnification 1 to 20.
1	1915 January 5 ..	..	..	..	Movements very small.
2	,, ,, 5 ..	23 34·9	23 46·5	0·2	L at $23^h 41·5^m$.
3	,, ,, 13 ..	..	..	..	Movements very small.
4	,, February 8 ..	11 8·8	..	..	Maximum not well marked.
5	,, ,, 21 ..	5 (?) 38·9	..	..	Do. do.
6	,, ,, 21 ..	15 1·5	..	..	Do. do.
7	,, ,, 28 ..	19 14·6	19 27·9	0·4	
8	,, March 3 ..	1 49·9	..	..	Do. do.
9	,, ,, 7 ..	21 21·2	..	...	Local shock.
10	,, ,, 12 ..	..	..	..	Movements very small.
11	,, ,, 17 ..	19 3·5	..	..	Maximum not well marked.
12	,, April 3 ..	..	..	..	Movements very small.
13	,, ,, 28 ..	..	..	..	Partially lost in shifting time.
14	,, ,, 30 ..	2 3·6	..	..	Maximum not well marked.
15	,, May 1 ..	5 11·4	curve passed out of range	of paper.	S at $5^h 20·7^m$; L at $5^h 37·5^m$.
16	,, ,, 2 ..	..	..	..	Movements very small.
17	,, ,, 5 ..	15 22·5	15 28·8	0·3	
18	,, ,, 12 ..	..	..	..	Movements very small.
19	,, ,, 21 ..	..	..	..	Lost as the instrument was dismounted.
20	,, June 1 ..	15 3·3	15 31·2	0·2	
21	,, ,, 3 ..	8 12·6	8 (?) 18·0	0·1	
22	,, ,, 6 ..	21 48·8	22 54·6	1·9	
23	,, ,, 17–18 ..	..	..	..	Movements very small.
24	,, ,, 22 ..	..	..	..	Do. do.
25	,, July 7 ..	6 51·8	..	..	Maximum not well marked.
26	,, ,, 31 ..	1 43·3	2 17·7	13·8	S at $1^h 52·8^m$; L at $2^h 9·3^m$.
27	,, August 3 ..	..	..	..	Beginning uncertain; maximum not well marked.
28	,, ,, 6 ..	..	..	..	Movements very small.
29	,, ,, 7 ..	..	..	..	Beginning uncertain; maximum not well marked.
30	,, ,, 11 ..	..	..	..	Movements very small.
31	,, ,, 12 ..	7 45·4	..	..	Maximum not well marked.
32	,, ,, 12 ..	..	9 29·6	0·9	Commencement uncertain as it is mixed in the hourly mark.
33	,, ,, 16 ..	..	..	..	Movements very small.

1915—*continued.*

Observatory number.	Date.	Time of Disturbances in G. M. T. Beginning.	Time of Disturbances in G. M. T. Maximum.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. M.	H. M.	Mm.	
34	1915 August 31 ..	..	..	..	Movements very small.
35	„ September 1 ..	..	1 16·8	0·3	Beginning uncertain.
36	„ „ 1 ..	..	..	..	Movements very small.
37	„ „ 7 ..	1 40·4	2 37·9	19·5	
38	„ „ 12 ..	..	..	..	Movements very small.
39	„ „ 23 ..	..	..	..	Do. do.
40	„ October 3 ..	7 12·7	7 56·5	10·1	
41	„ November 1 ..	7 34·2	8 3·3	3·2	
42	„ „ 1 ..	..	9 39·8	0·4	Beginning mixed in the end of the previous disturbance.
43	„ „ 18 ..	..	4 42·3	0·2	Beginning uncertain.
44	„ „ 21 ..	..	..	..	Movements very small.
45	„ „ 26 ..	..	..	..	Do. do.
46	„ „ 30 ..	..	..	..	Do. do.
47	„ December 3 ..	2 44·3	2 52·4	14·2	
48	„ „ 17 ..	7 10·3	7 19·6	0·9	Commencement not well defined.
49	„ „ 17 ..	..	..	..	Movements very small.
50	„ „ 19 ..	..	..	..	Disturbance lost owing to stoppage of clock.
51	„ „ 30 ..	2 41·0	..	..	Maximum not well marked.

TABLE IV.—*List of principal Disturbances registered by the Colaba Vertical Movement (Tilt) Seismograph.*

1911.

Observatory number.	Date.	Time of Disturbances in G. M. T. Beginning.	Maximum.	End.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. m.	H. m.	H. m.	Mm.	
1	1911 January 1 ..	10 22·1	* ..	10 52·1	..	Optical magnification 1 to 103. † Whenever the times are marked thus (†) it should be inferred that the trace is more or less disturbed by tremor movements and the times given, though they are tabulated with care, may not be quite accurate.
2	„ „ 1 ..	15 3·9	* ...	15 25·9	..	
3	„ „ 3–4 ..	23 31·0	* ..	0 39·0	..	
4	„ „ 4 ..	9 43·0	9 50·7	10 5·0	4·0	
5	„ „ 7 ..	2 25·6	2 32·7	2 40·6	0·7	
6	„ „ 14 ..	17 59·7	* ..	18 24·7	..	
7	„ „ 16 ..	9 1·7	* ..	9 20·7	..	
8	„ February 18 ..	18 43·9	* ..	19 5·9	..	
9	„ „ 23 ..	11 23·2	movements very small	11 41·2	movements very small	
10	„ April 18 ..	18 18·7	18 23·1	18 48·7	10·0	S at 18^h 22·2^m.
11	„ „ 29 ..	lost	in shifting	time.	..	
12	„ May 4 ..	13 36·0	13 42·3	13 49·0	4·0	S at 13^h 42·2^m.
13	„ „ 4–5 ..	23 47·9	23 58·2	0 25·9	3·6	S at 23^h 57·0^m.
14	„ June 7 ..	11 19·6	11 26·6	12 43·5	2·5	S at 11^h 33·5^m.
15	„ „ 8 ..	0 6·7	† ..	†0 12·7	..	
16	„ „ 15 ..	14 34·6	* ..	†15 10·6	..	
17	„ July 4 ..	13 37·3	* ..	14 13·3	..	
18	„ „ 5 ..	2 16·6	2 24·3	2 35·6	4·7	
19	„ „ „ ..	18 48·0	18 55·7	19 1·0	2·0	* Whenever the maximum is marked thus (*) it should be inferred that the trace is either too faint and the maximum uncertain or owing to rapidity of movement no impression is left on the photographic film indicating a true maximum.
20	„ „ 12 ..	4 16·7	* ..	4 41·7	..	
21	„ „ 19 ..	†20 30·1	20 32·7	†20 40·1	1·5	
22	„ August 16 ..	22 50·4	* ..	23 12·4	..	
23	„ „ 21 ..	†16 49·5	16 55·4	17 3·5	1·9	
24	„ September 6 ..	1 4·1	1 14·3	1 21·1	2·0	
25	„ „ 15 ..	†13 29·6	13 30·1	13 40·6	2·5	
26	„ „ 17 ..	3 40·1	·3 54·2	4 18·1	2·0	
27	„ „ 26 ..	14 13·8	14 23·5	14 33·8	1·2	
28	„ October 14 ..	23 27·2	* ..	23 57·2	..	
29	„ November 13 ..	16 25·7	16 36·3	16 40·7	2·2	
30	„ „ 30–Dec. 1 ..	23 42·9	* ..	0 5·9	..	
31	„ December 11 ..	†11 6·2	11 21·6	11 33·2	2·0	
32	„ „ 16 ..	†19 33·6	19 38·3	20 59·6	1·5	

1912.

1	1912 January 4 ..	15 59·6	..	16 14·6	..	Optical magnification 1 to 103. Movements very small.
2	„ „ 26 ..	14 50·8	14 52·1	15 1·8	1·1	
3	„ February 1 ..	..	..	..	..	Movements very small.
4	„ March 24 ..	12 24·4	...	12 29·4	..	Do. do. do.
5	„ April 1 ..	..	..	..	..	Lost in shifting time.
6	„ „ 23 ..	21. 48·9	*..	22 4·9	..	
7	„ „ 25 ..	10 29·6	*..	10 53·6	..	
8	„ May 6 ..	19 10·5	19 21·1	20 0·5	0·8	
9	„ „ 11 ..	17 32·1	17 32·5	17 47·1	4·5	
10	„ „ 21 ..	8 33·5	8 39·2	8 54·5	3·7	Commencement doubtful as it occurs at the time of hourly break.
11	„ „ 22 ..	23 12·1	23 16·2	23 33·0	7·0	
12	„ „ 23 ..	2 29·0	..	4 9·0	..	

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1912—*continued.*

Observatory number.	Date.	Time of Disturbances in G. M. T. Beginning.	Maximum.	End.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. m.	H. m.	H. m.	Mm.	
13	1912 June 7 ..	18 48·7	18 52·8	19 13·7	0·7	
14	„ „ 26 ..	17 2·6	17 3·0	17 15·6	3·6	
15	„ July 7 ..	8 10·8	8 21·7	9 10·8	3·1	S at 8^h 21·3^m (?).
16	„ „ 24 ..	†12 10·0	† ..	12 32·0	..	
17	„ August 6 ..	13 30·0	..	14 1·0	..	Commencement doubtful as the hourly breaks have failed.
18	„ „ 9 ..	† 1 37·5	1 45·6	2 37·5	4·8	S at 1^h 44·1^m.
19	„ „ 17 ..	19 21·0	19 29·4	20 2·0	4·5	S at 19^h 28·7^m.
20	„ „ 23 ..	14 5·9	14 7·9	14 22·9	4·4	
21	„ „ 23 ..	21 45·5	21 51·5	22 7·5	22·7	
22	„ September 11 ..	0 53·3	1 0·6	1 17·3	3·4	
23	„ „ 13 ..	23 41·0	23 41·7	24 1·0	1·5	
24	„ „ 29 ..	21 3·0	..	21 36·0	..	Commencement doubtful as the hourly breaks have failed.
25	„ October 18 ..	†12 7·0	12 17·4	12 47·0	2·2	
26	„ November 7 ..	7 53·9	8 5·7	8 46·9	11·5	S at 8^h 4·8^m.
27	„ „ 28 ..	20 59·3	21 2·2	21 20·3	16·0	S at 21^h 2·7^m
28	„ December 8–9 ..	23 59·5	0 8·7	0 15·5	3·0	
29	„ „ 9 ..	8 51·9	8 55·8	9 17·9	1·3	
30	„ „ 24 ..	0 3·5	0 7·6	0 36·5	2·5	
31	„ „ 24 ..	18 15·5	18 16·0	18 34·5	1·1	
32	„ „ 28 ..	8 3·9	8 4·2	8 16·9	1·5	

1913.

						Optical magnification 1 to 103.
1	1913 January 7 ..	22 59·0	22 59·6	23 25·4	4·8	S at 23^h 5·7^m.
2	„ „ 11 ..	13 25·6	13 33·2	13 54·3	5·0	S at 13^h 32·7^m.
3	„ „ 19 ..	17 10·3	17 17·5	17 45·1	>22·5*	
4	„ „ 19–20 ..	23 58·7	0 7·7	0 20·3	3·5	Not recorded in any other seismographs.
5	„ February 20 ..	† 9 9·4	9 18·9	9 25·0	..	Beginning approximate as it occurs at the time of the hourly break.
6	„ March 6 ..	2 12·7	* ..	2 38·2	..	
7	„ „ „ ..	11 7·9	* ..	11 33·0	..	Commencement doubtful as it occurs at the time of hourly break.
8	„ „ 10 ..	19 14·7	19 17·3	19 27·5	>7·5*	
9	„ „ 14 ..	8 54·1	* ..	9 44·3	..	S at 9^h 1·2^m.
10	„ „ 14 ..	18 8·0	18 9·0	18 18·2	2·1	
11	„ „ 23 ..	20 57·9	21 7·6	21 16·9	1·5	
12	„ „ 24 ..	10 38·6	10 38·6	10 57·9	6·0	
13	„ „ 27 ..	3 18·9	3 21·0	3 32·2	1·6	
14	„ „ 28 ..	17 17·1	17 19·7	17 28·3	2·6	S at 17^h 19·1^m. Not recorded in any other seismographs.
15	„ „ 31 ..	3 54·1	4 5·1	4 17·2	9·7	
16	„ April 7 ..	13 58·7	..	..	..	Movements very small.
17	„ „ 9 ..	18 11·8	18 12·1	18 13·9	3·2	
18	„ „ 13 ..	6 50·2	6 57·2	7 4·6	0·6	
19	„ „ 14 ..	7 52·9	7 57·4	8 5·7	1·5	
20	„ „ 18 ..	19 11·5	19 11·7	19 27·9	2·3	
21	„ „ 24 ..	10 24·7	10 32·2	10 39·2	1·2	

1913—*continued.*

Observatory number.	Date.			Time of Disturbances in G. M. T. Beginning.	Maximum.	End.	Amplitude or half the complete range of maximum motion.	Remarks.
				H. m.	H. m.	H. m.	Mm.	
22	1913 April	24	..	12 25·9	12 27·0	12 37·2	0·7	
23	„ „	25	..	18 5·9	* ..	18 18·9	..	
24	„ „	28	..	18 48·9	18 50·4	19 0·6	0·4	
25	„ „	30	..	†11 47·7	11 59·1	12 2·2	1·2	
26	„ May	16	..	12 32·8	* ..	12 54·1	4·0*	
27	„ „	18	..	2 19·9	2 30·5	2 38·0	1·5	
28	„ „	24	..	23 44·3	23 44·6	23 53·5	3·0	Not recorded in any other seismographs.
29	„ „	29	..	13 37·2	13 43·9	13 59·7	1·5	
30	„ „	30	..	11 57·9	12 3·6	12 20·2	2·5	
31	„ June	14	..	9 41·9	9 45·6	9 54·3	2·7	
32	„ „	22	..	† ..	14 14·1	14 20·7	6·0	
33	„ July	8	..	† ..	22 31·2	† ..	3·5	Not recorded in any other seismographs.
34	„ „	12	..	† ..	10 43·5	† ..	2·0	
35	„ „	22	..	† ..	6 57·4	† ..	3·0	
36	„ August	1	..	†17 20·8	17 27·9	†17 48·9	2·0	
37	„ „	6	..	22 33·9	*	† ..	..	
38	„ „	13	..	4 33·2	4 39·8	† 4 57·5	5·8	
39	„ „	15	..	† ..	19 22·1	† ..	1·8	
40	„ September	3	..	21 3·9	21 14·0	† ..	4·5	
41	„ „	16	..	12 10·9	12 11·3	† ..	1·3	
42	„ „	22	..	20 41·1	20 41·6	20 48·8	1·1	Not recorded in any other seismographs.
43	„ October	11	..	4 3·3	4 19·2	† ..	1·4	
44	„ „	11	..	9 18·4	9 21·4	† ..	1·3	
45	„ „	13	..	13 19·6	13 20·0	† ..	2·0	Not recorded in any other seismographs.
46	„ „	14	..	8 25·8	8 27·4	† ..	3·3	
47	„ „	29	..	4 38·4	4 46·3	..	1·5	End lost in shifting time.
48	„ November	10	..	21 29·3	21 31·2	21 46·2	1·1	
49	„ „	14	..	20 54·0	20 59·6	21 1·9	1·1	
50	„ „	19	..	3 29·7	3 32·1	4 7·1	1·1	
51	„ „	30	..	17 34·3	17 36·7	17 46·1	2·1	S at 17^h 36·1^m. Not recorded in any other seismographs.
52	„ December	2	..	20 3·6	20 3·7	20 18·1	2·5	
53	„ „	18	..	7 24·5	7 24·9	† ..	6·0	
54	„ „	21	..	15 43·7	15 50·5	16 6·0	3·8	S at 15^h 48·5^m.

1914.

								Optical magnification 1 to 103.
1	1914 January	20	..	12 2·2	12 13·0	12 50·8	1·0	
2		30	..	3 55·6	3 55·8	4 15·8	8·9	
3		30	..	7 54·8	7 55·5	8 29·1	4·0	Not recorded in any other seismographs.
4		31	..	13 20·3	13 26·7	13 38·9	1·0	Do. do.
5	February	6	..	11 44·6	11 49·2	12 15·4	>18·0*	S at 11^h 46·8^m.
6		22	..	21 15·8	21 28·1	21 40·4	2·2	
7		26	..	5 17·0	5 19·0	5 40·7	3·5	S at 5^h 30·8^m.
8	March	6	..	19 17·2	19 29·1	19 46·7	1·0	
9		6	..	20 40·2	20 55·8	21 9·1	2·9	
10		14	..	20 10·5	20 10·8	20 58·8	3·0	

1914—*continued.*

Observatory number.	Date.	Time of Disturbances G. M. T. Beginning.	Maximum.	End.	Amplitude or half the complete range of maximum motion.	Remarks.
		H. m.	H. m.	H. m.	Mm.	
11	1914 March 16 ..	22 52·5	23 0·7	23 9·1	2·0	S at 22^h $59·7^m$. Not recordred in any other seismographs.
12	,, ,, 18 ..	4 31·8	5 6·7	..	5·0	End lost in shifting time.
13	,, ,, 28 ..	10 50·0	11 2·2	11 22·0	14·0	S at 10^h $54·1^m$.
14	,, ,, 28 ..	13 20·9	13 28·1	13 38·4	2·5	Not recordred in any other seismographs.
15	,, ,, 30 ..	1 0·4	1 5·0	..	0·5	End uncertain.
16	,, April 8 ..	0 45·3	0 50·4	1 2·9	5·0	Not recorded in any other seismographs. S at 0^h $48·1^m$.
17	,, ,, 11 ..	16 43·9	16 55·1	17 6·0	1·0	S at 16^h $54·9^m$.
18	,, ,, 20 ..	13 49·4	13 54·0	14 6·0	0·9	
19	,, ,, 21 ..	23 29·9	23 34·3	23 48·6	1·9	S at 23^h $34·2^m$. Not recorded in any other seismograph.
20	,, ,, 25 ..	20 43·3	20 43·9	20 54·8	3·0	S at 20^h $44·3^m$. Not recorded in any other seismographs.
21	,, ,, 27 ..	2 11·4	2 11·7	† 2 27·1	0·9	Maximum partially passed out of paper.
22	,, ,, 30 ..	22 23·0	22 25·0	22 33·2	>11·0*	Not recorded in any other seismographs. S at 22^h $24·3^m$.
23	,, May 1 ..	6 9·1	6 10·7	6 12·7	3·3	
24	,, ,, 21 ..	8 31·8	8 34·4	8 53·8	>8·5*	
25	,, ,, 26 ..	2 49·6	2 50·2	2 58·6	3·0	
26	,, ,, 26 ..	14 33·5	14 36·5	15 50·7	12·0	S at 14^h $42·5^m$.
27	,, ,, 29 ..	4 52·4	..	5 41·5	..	Maximum lost in shifting time.
28	,, June 20 ..	†	7 41·9	†	1·5	
29	,, ,, 25 ..	19 14·6	* ..	† ..	..	
30	,, July 4 ..	† ..	17 59·3	† ..	1·7	
31	,, ,, 4 ..	† ..	23 56·8	† ..	2·2	
32	,, ,, 14 ..	† ..	3 19·8	† ..	1·6	
33	,, August 4 ..	22 48·1	* ..	† ..	..	
34	,, ,, 5 ..	† ..	10 48·1	† ..	2·5	
35	,, ,, 6 ..	† ..	* 4 26·1	† ..	* ..	
36	,, ,, 27 ..	† ..	14 48·9	† ..	2·6	Not recorded in any other seismographs.
37	,, September 26 ..	..	..	..	..	Lost in shifting time.
38	,, October 3 ..	17 41·5	17 44·5	18 7·1	1·0	
39	,, ,, 3 ..	22 14·9	22 23·4	22 59·9	3·5	
40	,, ,, 9 ..	2 42·5	* ..	3 17·9	..	S at 2^h $45·2^m$.
41	,, ,, 9 ..	3 39·1	3 40·9	3 56·8	7·5	
42	,, ,, 11 ..	1 31·7	1 33·3	1 46·6	3·5	Not recorded in any other seismographs. S at 1^h $33·3^m$.
43	,, ,, 11 ..	16 21·7	* ..	16 49·7	..	S at 16^h $25·4^m$.
44	,, ,, 23 ..	6 28·2	6 31·7	7 9·2	5·5	S at 6^h $35·9^m$.
45	,, November 4 ..	11 10·8	* ..	11 39·5	..	S at 11^h $14·1^m$.
46	,, ,, 22 ..	8 33·1	8 40·0	8 54·8	1·0	
47	,, ,, 24 ..	12 3·7	* ..	13 0·0	..	S at 12^h $12·3^m$.
48	,, ,, 28 ..	10 54·9	10 55·1	11 13·9	2·5	
49	,, December 15 ..	10 26·8	10 30·7	10 40·4	1·6	

1915.

Observatory number.	Date.			Time of Disturbances in G. M. T. Beginning.	Maximum.	End.	Amplitude or half the complete range of maximum motion.	Remarks.
				H. m.	H. m.	H. m.	Mm.	
								Optical magnification 1 to 103.
1	1915 January	5	..	14 46·8	14 52·2	15 6·6	2·5	
2	,, ,,	5–6	..	23 34·8	* ..	0 14·8	..	
3	,, ,,	13	..	7 2·3	7 10·5	7 42·5	1·7	S at 7^h $10·0^m$.
4	,, February	8	..	11 9·0	11 13·3	11 25·1	3·8	
5	,, ,,	21	..	5 37·9	5 43·7	6 7·1	2·2	
6	,, ,,	21	..	15 0·9	15 4·0	15 26·1	11·0	
7	,, ,,	28	..	† ..	19 15·3	† ..	1·5	
8	,, March	3	..	1 49·4	1 49·9	2 2·1	3·7	
9	,, ,,	7	..	21 21·3	..	..	..	Local shock.
10	,, ,,	8	..	15 49·0	15 49·4	15 50·4	1·4	
11	,, ,,	12	..	14 57·4	14 57·9	† ..	2·0	
12	,, ,,	17	..	19 3·6	19 3·7	19 12·8	2·2	
13	,, April	3	..	13 53·2	13 57·6	14 2·0	1·2	
14	,, ,,	23	..	15 47·6	15 47·8	15 58·9	3·5	Not recorded in any other seismographs.
15	,, ,,	28	..	3 25·5	3 30·5	3 40·5	3·5	
16	,, ,,	30	..	1 59·9	..	2 10·7	..	Movements very small.
17	,, May	1	..	5(?) 10·5	5 12·3	6 54·8	5·7	S at 5^h $20·8^m$ (?).
18	,, ,,	5	..	15 17·9	15 23·0	15 30·7	2·8	
19	,, ,,	21	..	4 26·9	4 27·2	4 48·2	1·2	
20	,, June	3	..	8 12·6	8 16·4	8 30·2	4·6	
21	,, ,,	6	..	21 49·2	* ..	† ..	4·4	
22	,, ,,	17	..	† ..	23 49·9	† ..	2·2	
23	,, July	7	..	6 52·5	6 54·2	† ..	4·5	
24	,, ,,	31	..	1 43·4	1 54·5	† ..	5·7	
25	,, August	11	..	† ..	9 28·1	† ..	1·9	
26	,, ,,	12	..	7 45·0	7 53·1	† ..	4·0	S at 7^h $52·5^m$.
27	,, ,,	12	..	9 21·8	9 30·4	† ..	5·5	
28	,, ,,	31	..	20 52·2	20 59·4	† ..	3·7	Times approximate as there are no hourly breaks.
29	,, September	1	..	1 11·3	1 11·8	† ..	2·5	Do. do.
30	,, ,,	1	..	2 6·8	2 6·9	† ..	1·7	Do. do.
31	,, ,,	7	..	..	..	..	..	Disturbance lost owing to the smoking of chimney.
32	,, ,,	12	..	0 7·5	0 7·5	† ..	4·0	
33	,, ,,	23	..	8 21·5	8 22·8	8 35·5	2·3	
34	,, October	3	..	† ..	† ..	† ..	..	
35	,, ,,	12	..	21 39·7	21 48·9	21 54·1	1·4	Not recorded in any other seismographs.
36	,, ,,	26	..	22 15·4	22 15·9	22 29·8	2·1	Do. do.
37	,, November	1	..	7 34·3	7 43·5	† ..	6·5	S at 7^h $42·9^m$.
38	,, ,,	1	..	9 10·6	9 20·1	10 1·8	2·5	S at 9^h $18·7^m$.
39	,, ,,	18	..	4 12·9	4 22·1	..	2·1	End lost in shifting time.
40	,, ,,	18	..	20 27·8	20 34·4	20 39·9	1·7	
41	,, ,,	26	..	20 8·7	20 15·1	20 26·2	3·5	
42	,, ,,	30	..	20 4·3	20 4·8	20 16·1	1·4	
43	,, December	3	..	2 44·0	2 51·5	3 14·4	..	S at 2^h $47·9^m$. Maximum motion passed out of paper.
44	,, ,,	17	..	7 10·3	7 18·3	7 31·8	10·0	
45	,, ,,	17	..	19 11·2	19 19·4	19 29·0	2·6	
46	,, ,,	19	..	20 19·5	20 27·8	20 42·0	2·2	
47	,, ,,	28–29	..	23 58·6	23 59·0	0 22·4	2·9	Not recorded in any other seismographs.
48	,, ,,	30	..	2 40·7	2 44·5	2 53·7	1·6	
49	,, ,,	31	..	19 1·7	19 2·4	19 10·1	1·4	
50	,, ,,	31	..	23 13·6	23 18·8	23 34·1	1·9	

TABLES OF RESULTS

DERIVED FROM

ABSOLUTE MAGNETIC OBSERVATIONS

AND FROM

THE CONTINUOUS REGISTRATIONS OF THE MAGNETOGRAPHS

AT

ALIBAG.

1911—1915.

M N 78—a

Absolute Magnetical Observations, Alibag—Table Ia.

Observations of Vibration and Deflection, taken with Magnetometer No. 7 (T. Cooke and Sons) for the determination of Absolute Horizontal Force.

1911.

1911 Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	Angle of Deflection of Magnet marked 7. Distance. 30·0 cms.	Angle of Deflection of Magnet marked 7. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	Values of H. From Deflection at distance. 30·0 cms. ($H_{30\cdot0}$).	Values of H. Difference. $H_{22\cdot5}-H_{30\cdot0}$	Values of H. Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	s.	Cms.	°	° ′ ″	° ′ ″	°	Cms.	°							
JAN. 4	12 39	2·7061	1·35	25·9	+0·5	8·327	83·10	26 41 32	10 51 20	25·9	8·198	83·10	G. S. J.	939·07	0·36851	0·36850	+·00001	0·36850	
„ „	15 16	2·7070	1·36	26·3	„	7·896	83·10	26 42 20	10 51 38	26·1	7·854	83·10	G. S. J.	939·07	·36831	·36831	·00000	·36831	
„ 11	12 38	2·7070	1·36	26·9	+0·2	8·164	82·70	26 40 59	10 50 59	27·1	8·115	82·70	G. S. J.	939·03	·36842	·36846	−·00004	·36844	
„ „	14 59	2·7084	1·34	27·8	„	7·910	82·75	26 40 49	10 51 7	27·3	8·047	82·75	G. S. J.	938·84	·36831	·36829	+·00002	·36830	
„ 18	12 28	2·7059	1·37	27·8	+0·3	9·000	83·05	26 38 0	10 50 3	27·7	8·932	83·05	G. S. J.	939·01	·36891	·36889	+·00002	·36890	0·368429
„ „	15 16	2·7072	1·36	28·0	„	8·378	83·05	26 38 17	10 50 20	27·9	8·603	83·05	G. S. J.	938·79	·36871	·36864	+·00007	·36867	
„ 25	13 22	2·7084	1·45	27·8	−0·2	7·786	83·35	26 40 28	10 51 5	28·6	7·511	83·35	W. V. N.	939·05	·36822	·36818	+·00004	·36820	
„ „	15 38	2·7096	1·71	28·8	„	7·565	83·35	26 40 28	10 50 59	28·6	7·416	83·35	W. V. N.	938·77	·36812	·36810	+·00002	·36811	
FEB. 1	12 11	2·7045	1·40	23·5	+0·1	8·381	82·35	26 43 32	10 52 7	23·8	8·282	82·35	W. V. N.	939·14	·36849	·36848	+·00001	·36848	
„ „	14 43	2·7061	1·38	24·0	„	7·880	82·29	26 43 45	10 52 10	24·0	8·025	82·29	W. V. N.	938·79	·36828	·36828	·00000	·36828	
„ 8	12 13	2·7052	1·27	25·4	−0·2	8·830	81·70	26 40 51	10 51 11	25·7	8·573	81·70	W. V. N.	939·07	·36867	·36865	+·00002	·36866	
„ „	14 33	2·7071	1·26	26·0	„	8·220	81·75	26 41 16	10 51 13	25·9	8·421	81·75	W. V. N.	938·66	·36841	·36841	·00000	·36841	
„ 15	12 16	2·7059	1·32	27·0	−0·4	8·720	81·60	26 38 53	10 50 30	27·4	8·660	81·60	W. V. N.	939·05	·36877	·36872	+·00005	·36874	·368460
„ „	14 37	2·7079	1·29	27·9	„	8·213	81·65	26 39 55	10 50 47	27·7	8·382	81·65	W. V. N.	938·86	·36844	·36843	+·00001	·36843	
„ 22	12 39	2·7082	1·27	27·9	−0·3	7·855	82·02	26 39 36	10 50 41	28·6	7·756	82·02	W. V. N.	938·90	·36836	·36833	+·00003	·36834	
„ „	14 59	2·7087	1·36	28·9	„	7·772	82·05	26 39 41	10 50 42	28·7	7·692	82·05	W. V. N.	938·99	·36836	·36833	+·00003	·36834	
MAR. 1	12 30	2·7068	1·25	27·2	−0·2	8·561	82·65	26 40 1	10 50 51	27·7	8·127	82·65	W. V. N.	939·12	·36852	·36849	+·00003	·36850	
„ „	14 34	2·7080	1·27	27·8	„	7·755	82·65	26 40 5	10 50 50	27·7	7·962	82·65	W. V. N.	938·86	·36841	·36839	+·00002	·36840	
„ 8	12 36	2·7059	1·27	27·2	−0·2	8·468	83·00	26 39 21	10 50 39	27·2	8·425	83·00	W. V. N.	939·18	·36876	·36871	+·00005	·36873	
„ „	14 38	2·7067	1·28	27·4	„	7·960	83·00	26 39 52	10 50 45	27·6	8·127	83·00	W. V. N.	939·12	·36858	·36856	+·00002	·36857	
„ 16	12 27	2·7060	1·26	28·2	−0·2	8·820	83·40	26 37 54	10 50 4	28·3	8·595	83·40	W. V. N.	939·20	·36889	·36886	+·00003	·36887	
„ „	14 16	2·7073	1·27	28·5	„	8·260	83·45	26 38 32	10 50 7	28·3	8·355	83·45	W. V. N.	938·92	·36867	·36869	−·00002	·36868	·368611
„ 23	9 55	2·7082	1·28	28·0	+0·7	7·815	83·80	26 39 0	10 50 20	28·4	8·046	83·80	W. V. N.	938·66	·36845	·36846	−·00001	·36845	
„ „	10 57	2·7075	1·32	28·7	„	8·207	83·80	26 38 17	10 50 5	28·6	8·170	83·80	W. V. N.	938·92	·36865	·36866	−·00001	·36865	
„ 30	12 53	2·7073	1·40	29·6	−0·3	8·503	84·60	26 36 48	10 49 28	29·6	8·240	84·60	G. S. J.	938·99	·36882	·36884	−·00002	·36883	
„ „	15 16	2·7097	1·45	30·2	„	7·565	84·60	26 37 37	10 49 56	29·9	7·735	84·60	G. S. J.	938·62	·36844	·36841	+·00003	·36842	

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1911. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Effect of 90° Torsion.	Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	30·0 cms.	Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of H. Values of m.	From Deflection at distance. 22·5 cms. ($H_{22·5}$).	30·0 cms. ($H_{30·0}$).	Difference. $H_{22·5}-H_{30·0}$	Mean. $\frac{H_{22·5}+H_{30·0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
APRIL 5	12 19	2·7066	1·41	27·8	−0·3	8·442	85·05	26 38 40	10 50 16	27·2	8·330	85·05	G. S. J.	938·81	0·36878	0·36878	·00000	0·36878	
„ „ 15	14	2·7078	1·44	28·0	„	7·833	85·05	26 38 38	10 50 23	27·9	7·983	85·05	G. S. J.	938·62	·36858	·36854	+·00004	·36856	
„ „ 12	12 18	2·7075	1·44	28·3	−0·2	8·071	85·37	26 38 12	10 50 8	28·3	7·920	85·37	G. S. J.	938·75	·36865	·36863	+·00002	·36864	
„ „ 14	47	2·7084	1·45	28·7	„	7·525	85·35	26 38 46	10 50 23	28·6	7·574	85·35	G. S. J.	938·77	·36848	·36845	+·00003	·36846	
„ 19	12 24	2·7087	1·44	29·7	−0·1	7·525	85·91	26 37 52	10 49 53	29·7	7·537	85·91	G. S. J.	938·84	·36853	·36854	−·00001	·36853	0·368594
„ „ 15	14	2·7099	1·45	30·2	„	7·070	85·95	26 37 38	10 49 57	30·1	7·423	85·95	G. S. J.	938·62	·36839	·36837	+·00002	·36838	
„ 26	12 21	2·7082	1·43	30·0	−0·4	8·136	86·65	26 36 1	10 49 12	30·0	8·137	86·65	G. S. J.	938·66	·36878	·36879	−·00001	·36878	
„ „ 15	15	2·7092	1·46	30·8	„	7·696	86·70	26 36 16	10 49 29	30·5	7·842	86·70	G. S. J.	938·73	·36865	·36860	+·00005	·36862	
MAY 3	12 43	2·7087	1·43	30·5	−0·2	7·750	87·40	26 36 21	10 49 17	30·2	7·770	87·40	G. S. J.	938·71	·36871	·36873	−·00002	·36872	
„ „ 15	17	2·7092	1·43	30·5	„	7·482	87·40	26 36 41	10 49 25	30·6	7·622	87·40	G. S. J.	938·73	·36857	·36860	−·00003	·36858	
„ 10	12 39	2·7089	1·43	30·4	0·0	7·698	88·22	26 35 48	10 49 14	30·9	7·508	88·22	G. S. J.	938·69	·36867	·36865	+·00002	·36866	
„ „ 14	29	2·7098	1·44	31·2	„	7·188	88·30	26 35 58	10 49 21	31·1	7·357	88·30	G. S. J.	938·66	·36858	·36854	+·00004	·36856	
„ 17	12 49	2·7098	1·43	30·2	−0·2	6·830	89·25	26 38 22	10 50 6	29·7	6·810	89·25	G. S. J.	938·71	·36836	·36837	−·00001	·36836	
„ „ 15	18	2·7104	1·40	30·3	„	6·537	89·20	26 38 8	10 50 10	30·4	6·595	89·20	G. S. J.	938·69	·36826	·36821	+·00005	·36823	·368545
„ 22	16 5	2·7104	1·33	31·2	0·0	6·943	89·50	26 36 30	10 49 39	31·4	7·011	89·50	S. B. B.	938·73	·36843	·36835	+·00008	·36839	
„ 24	15 5	2·7096	1·42	31·6	0·0	7·282	89·70	26 35 47	10 49 11	31·8	7·149	89·70	G. S. J.	938·90	·36860	·36859	+·00001	·36859	
„ 26	14 46	2·7103	1·38	31·7	+0·3	7·348	90·05	26 35 21	10 49 9	31·3	7·162	90·05	S. B. B.	938·49	·36860	·36855	+·00005	·36857	
„ 29	14 13	2·7098	1·43	32·2	+0·1	7·336	90·25	26 34 56	10 48 46	32·2	7·226	90·25	G. S. J.	938·79	·36867	·36869	−·00002	·36868	
„ 31	14 50	2·7096	1·39	31·9	0·0	7·263	90·37	26 36 21	10 49 12	31·9	6·666	90·37	S. B. B.	938·86	·36864	·36868	−·00004	·36866	
JUNE 2	14 15	2·7088	1·44	30·9	−0·5	7·152	90·75	26 35 51	10 49 7	31·1	7·138	90·75	G. S. J.	938·86	·36870	·36871	−·00001	·36870	
„ 5	14 32	2·7103	1·35	31·7	−0·3	6·406	91·05	26 36 47	10 49 34	31·6	6·430	91·05	S. B. B.	938·92	·36843	·36841	+·00002	·36842	
„ 7	15 2	2·7097	1·44	31·9	−0·2	7·065	91·20	26 35 17	10 49 2	32·2	6·943	91·20	G. S. J.	938·90	·36864	·36860	+·00004	·36862	
„ 9	15 27	2·7094	1·40	30·9	+0·2	7·225	91·17	26 35 45	10 49 22	30·9	6·968	91·17	S. B. B.	938·69	·36865	·36859	+·00006	·36862	
„ 12	16 4	2·7096	1·25	28·4	+0·2	6·612	90·85	26 38 10	10 50 0	28·3	6·447	90·85	G. S. J.	937·99	·36838	·36840	−·00002	·36839	
„ 16	14 46	2·7088	1·20	28·5	−0·3	7·172	90·12	26 36 54	10 49 42	28·6	7·000	90·12	G. S. J.	938·10	·36861	·36857	+·00004	·36859	·368680
„ 19	14 34	2·7091	1·19	29·5	−0·2	7·410	89·75	26 35 51	10 49 17	29·6	7·264	89·75	S. B. B.	938·19	·36869	·36865	+·00004	·36867	
„ 21	14 54	2·7081	1·22	30·2	−0·1	7·785	89·70	26 34 41	10 48 46	30·4	7·595	89·70	G. S. J.	938·51	·36894	·36893	+·00001	·36893	
„ 23	14 40	2·7097	1·21	30·9	−0·2	7·223	89·60	26 34 35	10 49 0	31·0	7·125	89·60	S. B. B.	938·32	·36873	·36864	+·00009	·36868	
„ 26	14 17	2·7082	1·26	30·3	−0·4	7·815	89·40	26 34 25	10 48 49	30·3	7·646	89·40	G. S. J.	938·45	·36896	·36890	+·00006	·36893	
„ 28	14 43	2·7087	1·28	30·1	−0·2	7·709	89·42	26 35 15	10 49 7	30·1	7·391	89·42	S. B. B.	938·40	·36881	·36876	+·00005	·36878	
„ 30	14 11	2·7091	1·26	30·9	−0·1	7·603	89·50	26 34 28	10 48 42	30·8	7·400	89·50	G. S. J.	938·36	·36884	·36882	+·00002	·36883	
JULY 3	14 25	2·7104	1·24	31·8	−0·4	7·137	89·60	26 34 44	10 48 49	31·9	6·995	89·60	S. B. B.	938·45	·36862	·36860	+·00002	·36861	
„ 5	15 19	2·7102	1·27	30·1	−0·5	6·866	89·82	26 36 1	10 49 10	30·0	6·823	89·82	G. S. J.	937·99	·36853	·36854	−·00001	·36853	
„ 7	14 23	2·7087	1·26	28·8	−0·5	7·020	89·90	26 37 17	10 49 46	28·8	6·755	89·90	S. B. B.	938·32	·36860	·36858	+·00002	·36859	
„ 10	15 59	2·7070	1·25	26·8	−0·3	7·386	89·37	26 38 50	10 50 16	26·5	7·060	89·37	G. S. J.	938·32	·36869	·36871	−·00002	·36870	
„ 12	15 2	2·7087	1·28	29·0	+0·1	7·045	89·30	26 36 5	10 49 20	28·9	6·982	89·30	S. B. B.	938·08	·36873	·36871	+·00002	·36872	
„ 14	14 48	2·7085	1·25	28·6	+0·3	7·305	88·87	26 37 5	10 49 36	28·4	7·207	88·87	G. S. J.	938·17	·36866	·36867	−·00001	·36866	
„ 17	14 38	2·7079	1·23	29·8	0·0	8·316	88·52	26 33 50	10 48 32	29·8	8·200	88·52	S. B. B.	938·17	·36907	·36903	+·00004	·36905	·368696
„ 19	14 51	2·7103	1·25	30·0	−0·1	6·953	88·50	26 36 30	10 49 27	29·9	6·947	88·50	G. S. J.	938·08	·36847	·36845	+·00002	·36846	
„ 21	14 43	2·7082	1·25	29·2	−0·1	7·297	88·22	26 36 5	10 49 21	29·9	7·182	88·22	S. B. B.	938·53	·36872	·36870	+·00002	·36871	
„ 24	14 14	2·7099	1·27	29·7	+0·1	8·005	87·95	26 35 6	10 48 59	29·7	7·728	87·95	G. S. J.	938·45	·36894	·36891	+·00003	·36892	
„ 26	15 16	2·7098	1·24	30·1	0·0	7·208	87·97	26 35 20	10 48 56	30·1	7·137	87·97	S. B. B.	937·95	·36865	·36866	−·00001	·36865	
„ 28	14 14	2·7085	1·22	30·4	+0·2	7·700	88·20	26 35 17	10 48 56	30·2	7·430	88·20	G. S. J.	938·49	·36885	·36885	·00000	·36885	
„ 31	14 58	2·7083	1·23	27·8	+0·7	6·836	87·90	26 37 54	10 49 47	27·9	6·755	87·90	S. B B	938·12	·36858	·36862	−·00004	·36860	

Aug.	2	15	4	2·7081	1·25	28·3	+0·4	7·106	87·87	26	37	48	10	49	55	28·3	7·021	87·87	G. S. J.	938·45	0·36863	0·36863	·00000	0·36863	
„	4	14	33	2·7075	1·22	27·4	+0·3	7·023	87·65	26	38	0	10	49	55	27·8	6·855	87·65	S. B. B.	938·38	·36865	·36868	−·00003	·36866	
„	7	14	40	2·7069	1·25	26·8	+0·1	7·566	87·10	26	38	2	10	50	6	27·0	7·407	87·10	G. S. J.	938·32	·36875	·36872	+·00003	·36873	
„	11	14	32	2·7075	1·22	28·2	+0·3	7·656	86·70	26	36	40	10	49	30	28·3	7·545	86·70	G. S. J.	938·32	·36882	·36881	+·00001	·36881	
„	14	16	5	2·7079	1·34	28·8	+1·3	7·203	86·50	26	37	8	10	49	36	28·8	6·976	86·50	S. B. B.	938·53	·36873	·36874	−·00001	·36873	
„	16	14	35	2·7091	1·39	28·5	+1·7	7·015	86·30	26	37	52	10	49	58	28·5	6·936	86·30	G. S. J.	938·21	·36849	·36847	+·00002	·36848	0·368665
„	18	14	29	2·7078	1·32	28·9	+1·1	7·668	86·07	26	36	2	10	49	19	29·0	7·525	86·07	S. B. B.	938·38	·36885	·36882	+·00003	·36883	
„	21	14	38	2·7084	1·40	28·7	+0·9	7·303	86·07	26	37	6	10	49	42	28·6	7·223	86·07	G. S. J.	938·32	·36866	·36865	+·00001	·36865	
„	23	14	33	2·7084	1·36	29·0	+1·0	7·301	85·97	26	36	25	10	49	22	28·9	7·251	85·97	S. B. B.	938·25	·36874	·36875	−·00001	·36874	
„	25	14	42	2·7094	1·41	29·0	+0·9	6·803	86·00	26	37	49	10	50	0	29·0	6·621	86·00	G. S. J.	938·32	·36843	·36841	+·00002	·36842	
„	30	14	37	2·7071	1·40	26·9	+0·6	7·182	86·17	26	39	18	10	50	25	26·6	7·061	86·17	G. S. J.	938·45	·36863	·36865	−·00002	·36864	
Sept.	1	14	16	2·7065	1·37	28·0	+0·7	7·540	86·25	26	36	45	10	49	32	28·0	7·426	86·25	S. B. B.	938·56	·36895	·36894	+·00001	·36894	
„	4	14	29	2·7073	1·40	27·9	+1·0	7·195	86·25	26	37	32	10	49	51	27·9	7·262	86·25	G. S. J.	938·45	·36877	·36875	+·00002	·36876	
„	6	14	25	2·7083	1·41	29·1	+1·1	7·287	86·30	26	36	37	10	49	31	29·1	7·230	86·30	S. B. B.	938·40	·36871	·36870	+·00001	·36870	
„	8	14	31	2·7083	1·40	29·3	+1·6	7·450	86·35	26	36	16	10	49	25	29·2	7·260	86·35	G. S. J.	938·40	·36877	·36874	+·00003	·36875	
„	11	14	30	2·7082	1·36	29·5	+1·9	7·547	86·40	26	34	57	10	49	2	29·8	7·425	86·40	S. B. B.	938·32	·36888	·36882	+·00006	·36885	
„	15	14	30	2·7096	1·42	30·0	+1·9	7·182	86·80	26	35	51	10	49	19	30·0	7·147	86·80	S. B. B.	938·21	·36861	·36857	+·00004	·36859	·368620
„	20	15	42	2·7115	1·36	29·6	−0·4	5·032	87·12	26	39	6	10	50	16	29·8	5·362	87·12	S. B. B.	938·19	·36799	·36804	−·00005	·36801	
„	22	14	57	2·7105	1·44	29·6	−0·5	5·957	87·30	26	38	41	10	50	25	29·6	5·737	87·30	G. S. J.	938·47	·36819	·36815	+·00004	·36817	
„	25	14	32	2·7086	1·39	28·2	−0·2	7·008	87·50	26	37	1	10	49	38	28·4	6·885	87·50	S. B. B.	938·06	·36862	·36861	+·00001	·36861	
„	27	14	27	2·7087	1·41	29·4	−0·4	7·058	87·55	26	36	11	10	49	20	29·5	6·972	87·55	G. S. J.	938·30	·36869	·36868	+·00001	·36868	
„	29	14	56	2·7088	1·40	29·7	−0·1	7·216	87·75	26	35	5	10	48	57	30·0	7·117	87·75	G. S. J.	938·14	·36877	·36876	+·00001	·36876	
Oct.	4	14	41	2·7087	1·38	30·0	−0·2	6·886	88·12	26	35	52	10	49	17	30·0	6·843	88·12	S. B. B.	938·51	·36874	·36871	+·00003	·36872	
„	6	14	44	2·7091	1·42	29·8	−0·2	6·951	88·35	26	35	52	10	49	10	30·1	6·770	88·35	G. S. J.	938·30	·36866	·36866	·00000	·36866	
„	9	15	19	2·7098	1·39	29·9	−0·1	6·342	88·70	26	36	45	10	49	30	30·2	6·210	88·70	S. B. B.	938·32	·36847	·36846	+·00001	·36846	
„	11	14	29	2·7113	1·42	30·2	−0·3	5·692	88·85	26	37	20	10	49	45	30·3	5·755	88·85	G. S. J.	938·06	·36821	·36821	·00000	·36821	
„	13	14	36	2·7091	1·41	29·8	−0·3	6·870	89·00	26	35	42	10	49	11	29·9	6·796	89·00	S. B. B.	938·23	·36870	·36867	+·00003	·36868	
„	16	15	18	2·7092	0·35	30·1	−0·2	7·018	89·27	26	35	2	10	48	53	30·2	6·950	89·27	G. S. J.	938·23	·36880	·36878	+·00002	·36879	·368605
„	18	14	15	2·7113	0·39	31·0	−0·3	5·866	89·40	26	36	14	10	49	16	31·1	5·638	89·40	S. B. B.	938·23	·36837	·36838	−·00001	·36837	
„	20	14	36	2·7107	0·36	30·1	−0·4	6·247	89·52	26	36	25	10	49	27	30·1	6·198	89·52	G. S. J.	938·10	·36846	·36843	+·00003	·36844	
„	25	14	31	2·7087	0·36	29·4	0·0	6·678	89·60	26	35	59	10	49	13	29·6	6·570	89·60	G. S. J.	938·38	·36876	·36876	·00000	·36876	
„	27	14	11	2·7075	0·39	28·1	0·0	7·026	89·47	26	36	6	10	49	14	28·6	6·882	89·47	S. B. B.	938·30	·36888	·36888	·00000	·36888	
„	30	14	28	2·7087	0·36	28·5	−0·2	6·686	89·40	26	36	28	10	49	32	28·7	6·702	89·40	G. S. J.	938·14	·36871	·36867	+·00004	·36869	
Nov.	1	14	49	2·7089	0·34	30·1	−0·2	6·808	89·30	26	34	46	10	48	48	31·0	6·575	89·30	S. B. B.	938·47	·36879	·36877	+·00002	·36878	
„	3	14	49	2·7099	0·35	30·9	−0·1	6·534	89·37	26	35	27	10	49	5	31·0	6·246	89·37	G. S. J.	938·51	·36865	·36864	+·00001	·36864	
„	6	15	20	2·7102	0·40	30·4	+0·1	6·390	89·22	26	35	35	10	49	8	30·6	6·276	89·22	S. B. B.	938·21	·36859	·36857	+·00002	·36858	
„	8	15	14	2·7099	0·35	30·2	+0·1	6·580	89·15	26	35	37	10	49	2	30·4	6·520	89·15	G. S. J.	938·21	·36863	·36865	−·00002	·36864	
„	10	15	28	2·7101	0·38	30·3	0·0	6·375	89·10	26	36	27	10	49	2	30·5	6·353	89·10	A	938·27	·36850	·36860	−·00010	·36855	
„	13	14	29	2·7106	0·37	29·7	−0·1	6·186	89·00	26	37	4	10	49	40	29·8	6·032	89·00	G. S. J.	938·14	·36838	·36837	+·00001	·36837	
„	15	14	42	2·7107	0·36	30·0	−0·1	6·215	88·85	26	36	0	10	49	20	30·2	6·158	88·85	A	937·99	·36849	·36845	+·00004	·36847	·368614
„	17	14	26	2·7111	0·36	29·7	0·0	6·045	88·70	26	36	59	10	49	35	30·0	5·955	88·70	G. S. J.	937·97	·36831	·36832	−·00001	·36831	
„	20	15	12	2·7084	0·33	29·4	+0·1	6·488	88·55	26	37	10	10	49	43	29·3	6·291	88·55	A	938·75	·36871	·36869	+·00002	·36870	
„	22	15	17	2·7082	0·34	28·3	+0·1	6·625	88·55	26	36	53	10	49	37	28·3	6·598	88·55	G. S. J.	938·27	·36875	·36873	+·00002	·36874	
„	24	15	15	2·7092	1·39	29·1	+0·1	6·651	88·60	26	36	25	10	49	34	29·9	6·600	88·60	A	938·27	·36854	·36849	+·00005	·36851	
„	27	14	41	2·7073	1·27	28·3	+0·3	6·790	88·65	26	36	16	10	49	24	28·1	6·690	88·65	G. S. J.	938·25	·36891	·36889	+·00002	·36890	
„	29	14	42	2·7086	1·29	29·5	+0·5	6·760	88·55	26	35	35	10	48	55	29·6	6·815	88·55	A	938·17	·36877	·36882	−·00005	·36879	
Dec.	1	14	30	2·7083	1·35	29·3	+0·7	6·837	88·55	26	35	27	10	49	8	29·5	6·770	88·55	G. S. J.	938·25	·36882	·36878	+·00004	·36880	
„	4	13	57	2·7084	1·36	29·6	+0·6	6·765	88·37	26	35	11	10	48	57	30·0	6·675	88·37	A	938·32	·36882	·36881	+·00001	·36881	
„	6	14	35	2·7082	1·38	29·0	+0·5	6·857	88·22	26	35	25	10	49	9	29·1	6·842	88·22	G. S. J.	938·12	·36885	·36881	+·00004	·36883	
„	8	14	23	2·7077	1·36	29·4	+0·2	6·576	88·10	26	36	15	10	49	22	29·5	6·478	88·10	A	938·66	·36882	·36881	+·00001	·36881	
„	11	14	43	2·7138	1·38	29·8	0·0	3·595	88·00	26	42	2	10	51	33	29·8	3·651	88·00	G. S. J.	938·30	·36738	·36738	·00000	·36738	
„	13	14	34	2·7096	1·44	29·4	−0·2	6·039	87·90	26	37	19	10	49	36	29·6	6·010	87·90	A	938·23	·36843	·36847	−·00004	·36845	
„	15	14	29	2·7084	1·36	28·8	0·0	6·430	87·80	26	36	26	10	49	24	29·0	6·391	87·80	G. S. J.	938·21	·36871	·36871	·00000	·36871	·368582
„	18	14	40	2·7080	1·39	28·0	+0·1	6·183	87·62	26	38	9	10	50	17	28·0	6·182	87·62	A	938·49	·36860	·36853	+·00007	·36856	
„	20	14	29	2·7079	1·34	28·2	0·0	6·580	87·42	26	36	40	10	49	37	28·5	6·480	87·42	G. S. J.	938·27	·36874	·36870	+·00004	·36872	
„	22	14	26	2·7080	1·42	28·4	−0·1	6·305	87·25	26	37	42	10	49	50	28·5	6·325	87·25	A	938·47	·36863	·36864	−·00001	·36863	
„	27	14	50	2·7083	1·43	28·7	+0·1	6·405	86·80	26	37	24	10	49	49	28·7	6·393	86·80	A	938·45	·36863	·36861	+·00002	·36862	
„	29	14	31	2·7082	1·34	28·2	+0·1	6·443	86·77	26	36	52	10	49	32	28·6	6·456	86·77	G. S. J.	938·17	·36867	·36867	·00000	·36867	
																			Mean for the year	938·51	..	..	+·000014		

The mean *observed value of the Horizontal Force for the year 1911=0·368592

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table Ib.

Observations of Vibration and Deflection, taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.) for the determination of Absolute Horizontal Force.

1911.

1911. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection. Distance. 23 cms.	Angle of Deflection. Distance. 30 cms.	Angle of Deflection. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 23 cms. (H_{23}).	Values of H. From Deflection at distance. 30 cms. (H_{30}).	Values of H. Difference. $H_{23}-H_{30}$	Values of H. Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
Jan. 2	12 48	2·8680	1·63	25·7	+0·3	8·942	83·00	23 50 37	10 30 35	25·6	8·687	83·00	G. S. J.	916·94	0·36870	0·36866	+·00004	0·36868	
„ „	15 17	2·8689	1·62	25·8	„	8·476	83·10	23 50 39	10 30 25	25·7	8·566	83·10	G. S. J.	916·64	·36857	·36859	−·00002	·36858	
„ 9	13 7	2·8702	1·62	26·6	+0·4	8·026	82·75	23 51 20	10 30 49	26·7	7·967	82·75	G. S. J.	916·90	·36831	·36830	+·00001	·36830	
„ „	14 58	2·8700	1·62	26·7	„	8·418	82·80	23 50 25	10 30 28	26·7	8·152	82·80	G. S. J.	916·71	·36845	·36843	+·00002	·36844	
„ 16	12 31	2·8693	1·65	27·0	+0·4	8·624	82·85	23 50 27	10 30 25	26·9	8·265	82·85	G. S J	917·00	·36854	·36854	·00000	·36854	0·368520
„ „	15 18	2·8706	1·74	27·3	„	7·918	82·90	23 49 45	10 30 10	27·4	8·140	82·90	G S. J	916·56	·36843	·36842	+·00001	·36842	
„ 23	12 55	2·8701	1·92	28·8	−0·2	8·592	83·17	23 48 20	10 29 35	28·7	8·552	83·17	W V N	916·87	·36866	·36865	+·00001	·36865	
„ „	15 21	2·8706	2·03	28·9	„	8·600	83·25	23 47 35	10 29 25	28·8	8·621	83·25	W V N	916·58	·36870	·36863	+·00007	·36866	
„ 30	12 16	2·8683	1·87	25·1	0·0	8·577	82·70	23 51 25	10 30 44	25·2	8·360	82·70	W V. N.	916·77	·36854	·36855	−·00001	·36854	
„ „	14 41	2·8693	1·86	25·6	„	8·110	82·70	23 52 1	10 30 55	25·2	8·215	82·70	W. V. N.	916·71	·36837	·36841	−·00004	·36839	
Feb. 6	12 33	2·8676	2·02	25·0	0·0	8·762	81·85	23 51 5	10 30 45	25·0	8·662	81·85	W. V. N.	916·85	·36866	·36864	+·00002	·36865	
„ „	14 34	2·8689	2·04	25·6	„	8·373	81·90	23 50 56	10 30 46	25·4	8·642	81·90	W. V. N.	916·64	·36852	·36847	+·00005	·36849	
„ 13	12 17	2·8698	2·09	27·4	−0·4	8·717	81·55	23 48 12	10 29 37	27·7	8·600	81·55	W. V. N.	916·41	·36868	·36864	+·00004	·36866	
„ „	14 37	2·8706	2·08	27·4	„	8·221	81·55	23 49 24	10 30 4	27·4	8·310	81·55	W. V. N.	916·43	·36846	·36843	+·00003	·36844	
„ 20	12 54	2·8697	2·05	27·3	−0·3	8·703	81·90	23 49 40	10 30 7	27·3	8·510	81·90	W. V. N.	916·73	·36854	·36854	·00000	·36854	·368504
„ „	14 32	2·8699	2·07	27·4	„	8·283	81·90	23 49 26	10 30 1	27·2	8·407	81·90	W. V. N	916·58	·36857	·36855	+·00002	·36856	
„ 27	12 33	2·8703	2·07	28·2	−0·5	8·315	82·70	23 50 7	10 30 15	27·3	8·136	82·70	W V. N.	916·85	·36849	·36849	·00000	·36849	
„ „	14 32	2·8715	2·08	27·8	„	7·687	82·70	23 50 47	10 30 35	27·5	7·900	82·70	W. V. N.	916·64	·36821	·36820	+·00001	·36820	
Mar. 6	12 19	2·8690	2·06	27·7	−0·1	8·642	82·90	23 48 24	10 29 42	27·6	8·605	82·90	W. V. N.	916·79	·36880	·36876	+·00004	·36878	
„ „	14 39	2·8704	2·11	27·8	„	7·872	82·90	23 49 49	10 30 16	27·7	8·047	82·90	W V. N.	916·77	·36844	·36841	+·00003	·36842	
„ 13	11 24	2·8680	2·09	26·6	−0·2	9·265	83·30	23 47 24	10 29 14	26·8	9·260	83·30	W. V. N.	916·37	·36903	·36899	+·00004	·36901	
„ „	15 2	2·8686	2·01	26·6	„	8·477	83·25	23 48 40	10 29 41	26·2	8·650	83·25	W. V. N.	916·41	·36885	·36884	+·00001	·36884	
„ 20	12 44	2·8700	1·63	28·0	−0·2	8·488	83·60	23 49 17	10 29 57	27·5	8·303	83·60	W. V. N.	916·79	·36863	·36862	+·00001	·36862	·368480
„ „	14 27	2·8736	1·55	27·8	„	6·432	83·55	23 50 39	10 30 35	27·6	7·546	83·55	W. V. N.	916·05	·36798	·36794	+·00004	·36796	
„ 27	12 24	2·8729	1·50	28·9	−0·3	7·454	84·25	23 50 16	10 30 25	28·7	7·164	84·25	W. V. N.	916·68	·36811	·36809	+·00002	·36810	
„ „	14 20	2·8730	1·52	28·8	„	6·981	84·25	23 50 1	10 30 15	28·7	7·096	84·25	W. V N	916·49	·36811	·36811	·00000	·36811	

April	3	12	29	2·8694	1·40	28·9	−0·5	8·720	85·00	23	47	35	10	29	17	28·1	8·557	85·00	G. S. J.	916·85	0·36895	0·36893	+·00002	0·36894	
,,	,,	15	13	2·8717	1·49	28·7	,,	7·718	85·00	23	48	4	10	29	27	28·5	8·089	85·00	G. S. J.	916·28	·36854	·36852	+·00002	·36853	
,,	10	12	5	2·8712	1·43	28·2	−0·1	7·755	85·40	23	49	49	10	30	8	27·3	7·441	85·40	G. S. J.	916·58	·36846	·36846	·00000	·36846	
,,	,,	14	50	2·8724	1·39	27·9	,,	7·022	85·40	23	49	52	10	30	18	27·3	7·326	85·40	G. S. J.	916·22	·36827	·36824	+·00003	·36825	
,,	17	12	30	2·8720	1·38	28·5	−0·2	7·190	85·70	23	50	57	10	30	43	27·5	6·697	85·70	G. S. J.	916·83	·36822	·36820	+·00002	·36821	0·368416
,,	,,	15	17	2·8727	1·38	27·8	,,	6·862	85·70	23	50	56	10	30	35	27·5	6·915	85·70	G. S. J.	916·41	·36808	·36809	−·00001	·36808	
,,	24	12	40	2·8713	1·52	29·1	−0·2	7·757	86·40	23	48	26	10	29	28	28·3	7·730	86·40	G. S. J.	916·49	·36859	·36862	−·00003	·36860	
,,	,,	15	18	2·8734	1·39	29·1	,,	6·830	86·47	23	48	52	10	29	53	28·2	7·327	86·47	G. S. J.	916·03	·36828	·36825	+·00003	·36826	
May	1	12	38	2·8715	1·46	30·2	−0·2	8·051	87·25	23	47	10	10	29	9	29·3	7·942	87·25	G. S. J.	916·60	·36873	·36870	+·00003	·36871	
,,	,,	15	17	2·8718	1·46	29·0	,,	7·454	87·25	23	47	47	10	29	17	28·8	7·571	87·25	G. S. J.	916·28	·36856	·36856	·00000	·36856	
,,	8	13	29	2·8726	1·75	30·4	−0·2	6·923	88·05	23	48	22	10	29	27	29·8	6·956	88·05	G. S. J.	916·64	·36838	·36841	−·00003	·36839	
,,	,,	14	58	2·8731	1·83	30·4	,,	6·923	88·05	23	48	4	10	29	26	29·9	6·963	88·05	G. S. J.	916·45	·36835	·36834	+·00001	·36834	
,,	15	12	41	2·8737	1·92	31·3	−0·2	6·707	88·95	23	48	25	10	29	21	30·9	6·381	88·95	G. S. J.	916·68	·36821	·36827	−·00006	·36824	·368586
,,	,,	14	50	2·8745	1·89	30·9	,,	6·229	89·00	23	48	32	10	29	38	30·9	6·220	89·00	G. S. J.	916·47	·36807	·36806	+·00001	·36806	
,,	23	11	58	2·8731	1·98	31·3	0·0	7·847	89·62	23	44	23	10	28	30	30·5	7·818	89·62	S. B. B.	915·86	·36882	·36863	+·00019	·36872	
,,	25	12	25	2·8712	2·51	31·2	+0·1	7·778	89·85	23	45	44	10	28	16	30·8	7·729	89·85	G. S. J.	916·56	·36882	·36887	−·00005	·36884	
,,	27	11	54	2·8715	2·24	31·8	+0·2	7·728	90·10	23	45	1	10	28	21	31·2	7·684	90·10	S. B. B.	916·64	·36890	·36884	+·00006	·36887	
,,	30	12	36	2·8709	2·35	31·9	0·0	8·227	90·27	23	43	27	10	27	32	31·5	8·176	90·27	G. S. J.	916·37	·36914	·36912	+·00002	·36913	
June	1	12	11	2·8719	2·38	32·2	−0·2	7·248	90·52	23	45	52	10	28	55	30·8	7·010	90·52	S. B. B.	916·81	·36881	·36869	+·00012	·36875	
,,	6	11	57	2·8710	2·52	30·8	−0·2	7·560	91·15	23	44	59	10	28	45	30·4	7·375	91·15	S. B. B.	916·49	·36894	·36876	+·00018	·36885	
,,	8	12	39	2·8706	2·56	30·7	0·0	7·600	91·28	23	46	16	10	28	40	29·9	7·499	91·28	G. S. J.	916·64	·36887	·36887	·00000	·36887	
,,	10	11	43	2·8707	2·48	30·2	+0·2	7·300	91·17	23	45	21	10	28	45	29·8	7·152	91·17	S. B. B.	916·37	·36894	·36880	+·00014	·36887	
,,	13	12	12	2·8710	2·11	28·1	0·0	6·856	90·65	23	48	7	10	29	28	28·2	7·007	90·65	G. S. J.	916·22	·36855	·36854	+·00001	·36854	
,,	15	11	45	2·8715	2·24	29·1	−0·2	7·317	90·50	23	46	31	10	28	47	29·0	7·327	90·50	S. B. B.	915·93	·36868	·36868	·00000	·36868	·368834
,,	17	11	56	2·8700	2·08	28·7	−0·3	7·477	90·22	23	47	4	10	29	3	28·6	7·410	90·22	G. S. J.	916·45	·36882	·36881	+·00001	·36881	
,,	20	11	48	2·8704	2·19	29·6	−0·1	8·225	89·77	23	45	12	10	28	36	28·8	8·196	89·77	S. B. B.	916·09	·36905	·36894	+·00011	·36899	
,,	24	12	11	2·8702	2·16	29·6	−0·3	7·663	89·57	23	45	30	10	28	30	29·8	7·586	89·57	S. B. B.	916·41	·36895	·36891	+·00004	·36893	
,,	27	12	1	2·8701	2·21	29·9	−0·3	8·070	89·35	23	45	34	10	28	29	29·5	7·955	89·35	G. S. J.	916·41	·36900	·36897	+·00003	·36898	
,,	29	11	45	2·8709	2·19	30·0	−0·1	7·782	89·50	23	45	44	10	28	35	29·2	7·747	89·50	S. B. B.	916·18	·36892	·36888	+·00004	·36890	
July	1	12	6	2·8702	2·35	30·0	−0·2	7·913	89·42	23	45	47	10	28	31	29·5	7·748	89·42	G. S. J.	916·45	·36897	·36895	+·00002	·36896	
,,	4	11	52	2·8715	2·22	30·8	−0·4	7·515	89·75	23	45	40	10	28	37	29·9	7·422	89·75	S. B. B.	916·33	·36886	·36879	+·00007	·36882	
,,	6	12	6	2·8712	2·38	30·3	−0·5	7·577	89·85	23	46	48	10	28	45	29·0	7·545	89·85	G. S. J.	916·30	·36878	·36882	−·00004	·36880	
,,	8	12	29	2·8695	2·31	28·0	−0·5	7·485	89·75	23	48	15	10	29	27	27·3	7·400	89·75	G. S. J.	916·45	·36878	·36879	−·00001	·36878	
,,	11	11	41	2·8695	2·44	27·9	−0·1	7·180	89·40	23	47	35	10	29	21	27·7	7·102	89·40	S. B. B.	916·37	·36882	·36877	+·00005	·36879	
,,	13	12	12	2·8695	2·36	29·2	+0·2	7·943	89·40	23	46	40	10	28	42	28·8	7·766	89·40	S. B. B.	916·52	·36894	·36897	−·00003	·36895	
,,	15	12	29	2·8687	2·38	28·6	+0·2	8·128	88·72	23	46	8	10	28	38	28·5	7·997	88·72	G. S. J.	916·47	·36908	·36907	+·00001	·36907	·368840
,,	18	12	33	2·8702	2·35	29·5	0·0	7·297	88·57	23	46	7	10	28	42	28·9	7·365	88·57	S. B. B.	916·30	·36894	·36890	+·00004	·36892	
,,	20	12	3	2·8702	2·44	29·0	−0·1	7·545	88·27	23	47	6	10	28	59	28·6	7·476	88·27	G. S. J.	916·37	·36880	·36880	·00000	·36880	
,,	22	11	55	2·8691	2·38	28·3	0·0	7·476	88·00	23	47	34	10	29	17	28·1	7·360	88·00	S. B. B.	916·64	·36887	·36884	+·00003	·36885	
,,	25	11	55	2·8706	2·36	28·9	0·0	7·234	87·97	23	47	27	10	29	10	28·5	7·333	87·97	G. S. J.	916·35	·36871	·36871	·00000	·36871	
,,	29	12	16	2·8710	2·40	29·6	+0·4	7·151	88·07	23	48	2	10	29	16	28·9	6·837	88·07	G. S. J.	916·58	·36861	·36865	−·00004	·36863	
Aug.	1	11	22	2·8690	2·41	27·8	+0·5	7·536	87·85	23	47	12	10	29	13	27·7	7·488	87·85	S. B. B.	916·41	·36893	·36887	+·00006	·36890	
,,	3	12	20	2·8691	2·38	27·9	+0·3	7·668	87·77	23	47	47	10	29	18	27·8	7·385	87·77	G. S. J.	916·54	·36883	·36883	·00000	·36883	
,,	5	11	41	2·8692	2·44	26·3	+0·2	7·348	87·30	23	47	55	10	29	16	26·6	7·350	87·30	S. B. B.	915·90	·36877	·36880	−·00003	·36878	
,,	8	12	12	2·8689	2·43	27·4	0·0	7·778	87·00	23	47	6	10	29	6	27·3	7·786	87·00	G. S. J.	916·18	·36894	·36891	+·00003	·36892	
,,	10	11	56	2·8678	2·41	27·8	−0·1	8·391	86·80	23	45	41	10	28	41	27·6	8·367	86·80	S. B. B.	916·35	·36927	·36919	+·00008	·36923	
,,	12	12	14	2·8688	2·42	28·0	+0·7	7·941	86·65	23	47	1	10	29	0	27·7	7·888	86·65	G. S. J.	916·39	·36899	·36897	+·00002	·36898	
,,	15	12	6	2·8690	2·10	28·2	+1·5	8·013	86·47	23	46	45	10	28	57	27·8	7·972	86·47	S. B. B.	916·41	·36903	·36899	+·00004	·36901	·368856
,,	19	12	23	2·8695	1·58	27·3	+1·0	7·500	85·97	23	47	40	10	29	17	27·2	7·433	85·97	S. B. B.	916·26	·36886	·36885	+·00001	·36885	
,,	22	12	20	2·8695	2·21	28·3	+0·9	7·558	86·10	23	48	11	10	29	23	27·3	7·472	86·10	G. S. J.	916·49	·36882	·36885	−·00003	·36883	
,,	24	11	23	2·8717	2·10	28·8	+0·9	6·443	85·80	23	48	26	10	29	32	27·9	6·547	85·80	S. B. B.	916·16	·36851	·36852	−·00001	·36851	
,,	26	12	8	2·8706	2·11	28·6	+0·9	7·445	86·17	23	47	37	10	29	16	28·3	7·333	86·17	G. S. J.	916·33	·36871	·36869	+·00002	·36870	
,,	31	12	12	2·8697	2·22	27·6	+0·6	7·270	86·27	23	48	35	10	29	32	27·0	7·225	86·27	G. S. J.	916·33	·36872	·36875	−·00003	·36873	
Sept.	2	13	11	2·8691	2·23		+0·8	7·931	86·22	23	47	12	10	29	7	27·8	7·873	86·22	S. B. B.	916·41	·36892	·36890	+·00002	·36891	
,,	5	12	12	2·8698	2·29	28·5	+1·0	7·692	86·22	23	47	2	10	29	3	28·0	7·600	86·22	G. S. J.	916·30	·36888	·36887	+·00001	·36887	
,,	7	11	38	2·8700	2·25	28·8	+1·3	7·686	86·20	23	46	48	10	28	57	28·2	7·730	86·20	S. B. B.	916·30	·36890	·36888	+·00002	·36889	
,,	9	12	38	2·8702	2·27	28·6	+1·7	7·437	86·32	23	46	54	10	28	52	28·2	7·543	86·32	G. S. J.	916·18	·36884	·36886	−·00002	·36885	
,,	14	11	19	2·8700	2·45	29·5	+2·0	7·347	86·65	23	46	20	10	28	42	28·8	7·300	86·65	S. B. B.	916·39	·36895	·36894	+·00001	·36894	
,,	16	11	21	2·8718	2·39	29·6	+2·2	6·865	86·77	23	47	0	10	29	0	28·9	6·752	86·77	S. B. B.	916·09	·36864	·36863	+·00001	·36863	·368782
,,	19	12	9	2·8700	2·19	29·0	−0·3	7·512	87·07	23	46	31	10	28	38	28·8	7·540	87·07	G. S. J.	916·30	·36889	·36893	−·00004	·36891	
,,	21	13	14	2·8727	2·20	28·7	−0·4	6·215	87·25	23	50	7	10	30	12	28·3	5·812	87·25	S. B. B.	916·39	·36813	·36815	−·00002	·36814	
,,	23	12	44	2·8708	2·35	28·9	−0·4	6·957	87·40	23	48	8	10	29	21	28·4	6·857	87·40	G. S. J.	916·43	·36861	·36864	−·00003	·36862	
,,	26	11	22	2·8705	2·36	28·8	−0·3	7·037	87·55	23	47	9	10	28	58	28·2	7·180	87·55	S. B. B.	916·16	·36877	·36879	−·00002	·36878	
,,	28	11	38	2·8701	2·13	29·5	−0·2	7·452	87·65	23	46	15	10	28	30	29·0	7·440	87·65	G. S. J.	916·35	·36894	·36898	−·00004	·36896	
,,	30	11	9	2·8709	2·21	29·8	−0·2	7·650	87·80	23	46	1	10	28	28	29·1	7·637	87·80	S. B. B.	916·11	·36888	·36890	−·00002	·36889	

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

1911. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Effect of 90° Torsion.	Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Angle of Deflection. Distance. 23 cms.	30 cms.	Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 23 cms. (H_{23})	30 cms. (H_{30}).	Difference. $H_{23}-H_{30}$	Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
Oct. 3	11 56	2·8716	1·93	29·8	−0·3	6·837	88·00	23 47 35	10 29 11	28·9	6·793	88·00	G. S. J.	916·41	0·36864	0·36864	·00000	0·36864	
„ 5	11 31	2·8713	2·08	29·9	−0·2	7·123	88·22	23 45 48	10 28 29	29·8	7·079	88·22	S. B. B.	916·16	·36881	·36880	+·00001	·36880	
„ 7	12 26	2·8712	2·18	30·1	−0·2	7·235	88·47	23 46 2	10 28 36	29·7	6·997	88·47	G. S. J.	916·28	·36881	·36880	+·00001	·36880	
„ 10	11 20	2·8713	2·24	30·4	−0·2	7·137	88·82	23 45 5	10 28 10	29·9	7·155	88·82	S. B. B.	916·05	·36892	·36891	+·00001	·36891	
„ 12	12 25	2·8713	2·27	29·7	−0·3	6·773	88·90	23 46 59	10 29 0	29·1	6·745	88·90	G. S. J.	916·30	·36870	·36869	+·00001	·36869	
„ 14	11 51	2·8712	2·22	30·0	−0·3	7·042	89·05	23 46 11	10 28 42	29·3	6·991	89·05	S. B. B.	916·22	·36882	·36880	+·00002	·36881	0·368777
„ 17	11 58	2·8710	2·25	30·7	−0·2	7·036	89·32	23 45 40	10 28 22	30·6	6·876	89·32	G. S. J.	916·54	·36885	·36886	−·00001	·36885	
„ 19	11 59	2·8718	2·23	30·5	−0·3	6·505	89·42	23 46 34	10 28 45	30·2	6·342	89·42	S. B. B.	916·41	·36865	·36866	−·00001	·36865	
„ 26	11 34	2·8707	2·28	28·7	0·0	6·696	89·57	23 47 31	10 29 16	28·3	6·655	89·57	G. S. J.	916·26	·36870	·36867	+·00003	·36868	
„ 28	12 39	2·8706	2·24	29·0	0·0	6·875	89·37	23 46 43	10 28 57	28·6	6·788	89·37	S. B. B.	916·22	·36881	·36877	+·00004	·36879	
„ 31	12 28	2·8702	2·03	29·2	−0·3	7·353	89·35	23 46 5	10 28 32	29·0	7·140	89·35	G. S. J.	916·24	·36893	·36894	−·00001	·36893	
Nov. 2	12 32	2·8717	2·34	30·8	−0·1	7·103	89·40	23 45 10	10 28 14	30·1	6·927	89·40	S. B. B.	916·07	·36887	·36886	+·00001	·36886	
„ 4	13 17	2·8720	2·51	30·4	−0·1	6·228	89·32	23 47 26	10 29 6	29·6	6·250	89·32	G. S. J.	916·41	·36856	·36857	−·00001	·36856	
„ 7	12 34	2·8708	2·43	29·8	+0·2	6·962	89·20	23 46 36	10 28 36	29·5	6·750	89·20	A.	916·35	·36877	·36882	−·00005	·36879	
„ 9	12 26	2·8703	2·10	29·4	0·0	7·180	89·07	23 46 5	10 28 27	29·2	6·952	89·07	G. S. J.	916·26	·36891	·36894	−·00003	·36892	
„ 11	13 24	2·8712	1·73	29·9	0·0	6·850	88·97	23 46 3	10 28 23	29·8	6·732	88·97	A.	916·26	·36882	·36887	−·00005	·36884	
„ 14	13 3	2·8718	2·41	30·0	−0·2	6·660	88·92	23 47 14	10 29 6	29·3	6·588	88·92	G. S. J.	916·30	·36861	·36860	+·00001	·36860	
„ 16	12 33	2·8715	2·34	29·8	−0·1	6·546	88·77	23 47 4	10 28 40	30·0	6·483	88·77	A.	916·33	·36859	·36868	−·00009	·36863	·368828
„ 18	12 23	2·8708	2·14	29·7	0·0	6·946	88·75	23 46 21	10 28 40	29·4	6·795	88·75	G. S. J.	916·35	·36882	·36882	·00000	·36882	
„ 21	12 7	2·8692	2·18	28·8	+0·1	7·221	88·52	23 46 56	10 29 0	28·6	7·050	88·52	A.	916·68	·36894	·36893	+·00001	·36893	
„ 23	12 26	2·8690	2·62	28·8	+0·1	7·376	88·60	23 46 7	10 28 28	28·8	7·231	88·60	G. S. J.	916·39	·36903	·36905	−·00002	·36904	
„ 25	12 31	2·8685	2·13	29·5	+0·2	7·590	88·67	23 45 40	10 28 20	29·0	7·383	88·67	A.	916·73	·36922	·36924	−·00002	·36923	
„ 28	12 27	2·8700	2·60	28·0	+0·4	6·801	88·60	23 47 24	10 29 5	28·4	6·687	88·60	G. S. J.	916·24	·36871	·36872	−·00001	·36871	
„ 30	12 47	2·8713	2·15	29·3	+0·7	7·045	88·52	23 45 31	10 28 20	29·1	7·065	88·52	A.	915·76	·36884	·36884	·00000	·36884	
Dec. 2	12 52	2·8714	2·26	29·8	+0·7	6·617	88·52	23 46 49	10 28 58	29·3	6·570	88·52	G. S. J.	916·30	·36870	·36867	+·00003	·36868	
„ 5	12 17	2·8706	2·34	29·6	+0·6	6·837	88·30	23 46 22	10 28 41	29·1	6·814	88·30	A.	916·28	·36885	·36886	−·00001	·36885	
„ 9	12 23	2·8709	2·48	29·8	0·0	7·006	88·20	23 46 14	10 28 35	29·5	6·881	88·20	A.	916·24	·36879	·36881	−·00002	·36880	
„ 14	12 25	2·8714	2·57	29·8	−0·2	6·513	87·77	23 46 35	10 28 44	29·0	6·557	87·77	A.	916·07	·36873	·36875	−·00002	·36874	
„ 16	12 59	2·8710	2·61	29·3	0·0	6·615	87·77	23 47 26	10 29 6	28·4	6·465	87·77	G. S. J.	916·20	·36869	·36871	−·00002	·36870	
„ 19	12 30	2·8706	2·47	28·3	+0·1	6·405	87·50	23 47 57	10 29 20	28·1	6·345	87·50	A.	916·24	·36863	·36864	−·00001	·36863	·368738
„ 21	12 40	2·8704	2·36	28·0	−0·1	6·672	87·32	23 47 37	10 29 12	27·9	6·588	87·32	G. S. J.	916·11	·36869	·36870	−·00001	·36869	
„ 23	12 23	2·8693	2·36	28·1	−0·1	6·880	87·15	23 47 7	10 29 10	27·8	6·755	87·15	A.	916·37	·36890	·36886	+·00004	·36888	
„ 26	12 39	2·8700	2·64	28·0	+0·1	6·747	87·77	23 47 37	10 29 7	27·6	6·797	87·77	G. S. J.	916·11	·36876	·36878	−·00002	·36877	
„ 28	11 52	2·8704	2·64	28·1	+0·2	6·360	86·77	23 47 35	10 29 17	28·3	6·310	86·77	A.	916·20	·36865	·36863	+·00002	·36864	
„ 30	12 48	2·8707	2·10	28·5	+0·1	6·712	86·70	23 47 23	10 29 9	27·8	6·627	86·70	G. S. J.	916·07	·36874	·36874	·00000	·36874	
											Mean for the year			916·41			+·000011		

The mean *observed value of the Horizontal Force for the year 1911 = 0·368680

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

Absolute Magnetical Observations, Alibag—Table IIa.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1911.

Taken with Magnetometer No. 7 (T. Cooke and Sons.)

1911. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Mean Readings. Collimator Magnet. Scale apparently Inverted.	Mean Readings. Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Mean Readings. Horizontal Circle with Telescope pointed to. Kennery Light House.	Torsion. Mean.	Torsion. Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	Monthly Mean. *Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		Cms.	° ′ ″	Cms.	° ′ ″
JAN. 5	12 8	55·6	..	85 25 0	222 23 15	0	..	G. S. J.	5·807	0 55 10		
,, 12	12 2	55·6	..	85 26 0	222 23 0	0	..	G. S. J.	5·925	0 56 25	5·855	0 55 34
,, 19	11 58	55·6	..	85 25 5	222 22 40	0	..	V. V. N.	5·877	0 55 50		
,, 26	11 40	55·6	..	85 24 25	222 23 0	0	..	V. V. N.	5·810	0 54 50		
FEB. 2	11 53	55·6	..	85 25 35	222 22 50	0	..	V. V. N.	5·915	0 56 10		
,, 9	11 38	55·6	..	85 25 20	222 22 55	0	..	V. V. N.	5·900	0 55 50	5·884	0 55 52
,, 16	12 13	55·6	..	85 25 5	222 23 5	0	..	V. V. N.	5·860	0 55 25		
,, 23	11 57	55·6	..	85 25 30	222 22 50	0	..	V. V. N.	5·860	0 56 5		
MARCH 2	12 12	55·6	..	85 26 30	222 22 50	0	..	V. V. N.	6·000	0 57 5		
,, 9	11 57	55·6	..	85 24 55	222 22 50	0	..	V. V. N.	5·825	0 55 30		
,, 17	12 31	55·6	..	85 25 50	222 22 50	0	..	V. V. N.	5·900	0 56 25	5·888	0 55 55
,, 23	11 25	55·6	..	85 25 30	222 23 20	0	..	V. V. N.	5·890	0 55 35		
,, 31	11 10	55·6	..	85 24 35	222 23 0	0	..	G. S. J.	5·827	0 55 0		
APRIL 6	11 48	55·6	..	85 23 40	222 23 0	0	..	G. S. J.	5·732	0 54 5		
,, 13	11 57	55·6	..	85 23 25	222 23 5	0	..	G. S. J.	5·887	0 55 45	5·692	0 53 47
,, 20	12 2	55·6	..	85 23 10	222 23 5	0	..	G. S. J.	5·662	0 53 30		
,, 27	11 53	55 6	..	85 21 30	222 23 5	0	..	G. S. J.	5·487	0 51 50		
MAY 4	12 9	55·6	..	85 22 15	222 23 5	0	..	G. S. J.	5·582	0 52 35		
,, 11	11 52	55·6	..	85 22 50	222 23 5	0	..	G. S. J.	5·655	0 53 10		
,, 18	12 17	55·6	..	85 23 15	222 23 0	0	..	G. S. J.	5·657	0 53 40		
,, 22	13 47	55·6	..	85 23 30	222 22 55	0	..	S. B. B.	5·707	0 54 0		
,, 24	14 1	55·6	..	85 24 50	222 22 45	0	..	G. S. J.	5·845	0 55 30	5·687	0 53 56
,, 26	13 44	55·6	..	85 24 40	222 22 45	0	..	S. B. B.	5·787	0 55 20		
,, 29	13 45	55·6	..	85 23 5	222 22 30	0	..	G. S. J.	5·695	0 54 0		
,, 31	13 45	55·6	..	85 22 35	222 22 45	0	..	S. B. B.	5·567	0 53 15		
JUNE 2	13 45	55·6	..	85 22 55	222 22 45	0	..	G. S. J.	5·635	0 53 35		
,, 5	13 45	55·6	..	85 23 5	222 22 40	0	..	S. B. B.	5·690	0 53 50		
,, 7	14 17	55·6	..	85 23 10	222 22 30	0	..	G. S. J.	5·685	0 64 5		
,, 9	13 52	55·6	..	85 23 30	222 22 40	0	..	S. B. B.	5·695	0 54 15		
,, 12	15 20	55·6	..	85 24 25	222 22 30	0	..	G. S. J.	5·785	0 55 20		
,, 14	13 45	55·6	..	85 22 30	†131 22 0	0	..	S. B. B.	5·620	0 53 15		
,, 16	13 53	55·6	..	85 22 55	222 22 40	0	..	G. S. J	5·610	0 53 40	5·659	0 53 43
,, 19	13 45	55·6	..	85 23 5	222 22 45	0	..	S. B. B.	5·660	0 53 45		
,, 21	13 45	55·6	..	85 22 20	222 22 55	0	..	G. S. J.	5·590	0 52 50		
,, 23	13 45	55·6	..	85 23 40	222 23 15	0	..	S. B. B.	5·725	0 53 50		
,, 26	13 43	55·6	..	85 22 30	222 22 45	0	..	G. S. J.	5·640	0 53 10		
,, 28	13 43	55·6	..	85 22 45	222 22 40	0	..	S. B. B.	5·595	0 53 30		
,, 30	13 38	55·6	..	85 22 35	222 22 50	0	..	G. S. J.	5·640	0 53 10		
JULY 3	13 42	55·6	..	85 23 0	222 23 0	0	..	S. B. B.	5·650	0 53 25		
,, 5	14 26	55·6	..	85 23 40	222 22 50	0	..	S. B. B.	5·730	0 54 15		
,, 7	13 25	55·6	..	85 22 40	†131 22 20	0	..	S. B. B.	5·615	0 52 45		
,, 10	13 58	55·6	..	85 23 0	222 22 40	0	..	G. S. J.	5·665	0 53 45		
,, 12	14 5	55·6	..	85 22 30	222 22 55	0	..	S. B. B.	5·652	0 53 0		
,, 14	14 4	55·6	..	85 22 15	222 22 40	0	..	G. S. J.	5·635	0 53 0		
,, 17	13 45	55·6	..	85 22 0	222 23 0	0	..	S. B. B.	5·555	0 52 25	5·642	0 53 10
,, 19	13 45	55·6	..	85 22 25	222 23 0	0	..	G. S. J.	5·630	0 52 50		
,, 21	13 45	55·6	..	85 23 5	222 23 25	0	..	S. B. B.	5·692	0 53 5		
,, 24	13 36	55·6	..	85 22 40	222 23 0	0	..	G. S. J.	5·600	0 53 5		
,, 26	14 19	55·6	..	85 24 10	222 23 55	0	..	S. B. B.	5·685	0 53 40		
,, 28	13 37	55·6	..	85 21 50	222 23 5	0	..	G. S. J.	5·545	0 52 10		
,, 31	14 6	55·6	..	85 23 15	222 23 0	0	..	S. B. B.	5·690	0 53 40		

† As the Kennery Lighthouse was not visible the known azimuth of a fixed mark in the niche of the wall has been made use of.

1911. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Inverted.	Horizontal Circle with Telescope pointed to: Scale of Collimator Magnet.	Kennery Light House.	Torsion. Mean.	Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	*Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		Cms.	° ′ ″	Cms.	° ′ ″
Aug. 2	14 5	55·6	..	85 22 25	222 23 0	0	..	G. S. J.	5·640	0 52 50		
,, 4	13 45	55·6	..	85 23 50	222 23 30	0	..	S. B. B.	5·740	0 53 45		
,, 7	13 45	55·6	..	85 22 15	222 23 10	0	..	G. S. J.	5·632	0 52 30		
,, 11	13 45	55·6	..	85 22 20	222 23 10	0	..	G. S. J.	5·650	0 52 35		
,, 14	14 9	55·6	..	85 23 0	222 24 20	0	..	S. B. B.	5·640	0 52 5		
,, 16	13 45	55 6	..	85 23 30	222 23 0	0	..	G. S. J.	5·762	0 53 55	5·661	0 52 52
,, 18	13 45	55·6	..	85 22 50	222 23 25	0	..	S. B. B.	5·627	0 52 50		
,, 21	13 45	55·6	..	85 22 40	222 23 5	0	..	G. S. J.	5·672	0 53 0		
,, 23	13 46	55·6	..	85 22 40	222 23 40	0	..	S. B. B.	5·610	0 52 25		
,, 25	13 52	55·6	..	85 23 35	222 23 15	0	..	G. S. J.	5·732	0 53 45		
,, 30	13 45	55·6	..	85 21 50	222 23 20	0	..	G. S. J.	5·567	0 51 55		
Sept. 1	13 24	55·6	..	85 21 45	222 23 30	0	..	S. B. B.	5·505	0 51 40		
,, 4	13 45	55·6	..	85 21 55	222 23 0	0	..	G. S. J.	5·590	0 52 20		
,, 6	13 45	55·6	..	85 21 50	222 23 10	0	..	S. B. B.	5·535	0 52 5		
,, 8	13 45	55·6	..	85 21 50	222 23 0	0	..	G. S. J.	5·605	0 52 15		
,, 11	13 45	55·6	..	85 21 0	222 23 5	0	..	S. B. B.	5·490	0 51 20		
,, 15	13 45	55·6	..	85 22 45	222 23 35	0	..	S. B. B.	5·630	0 52 35	5·583	0 52 17
,, 20	14 57	55·6	..	85 24 10	222 23 25	0	..	S. B. B.	5·745	0 54 10		
,, 22	14 8	55·6	..	85 22 55	222 23 15	0	..	G. S. J.	5·665	0 53 5		
,, 25	13 46	55·6	..	85 21 40	222 23 25	0	..	S. B. B.	5·520	0 51 40		
,, 27	13 41	55·6	..	85 21 10	222 23 20	0	..	G. S. J.	5·500	0 51 15		
,, 29	14 12	55·6	..	85 22 30	222 23 15	0	..	G. S. J.	5·645	0 52 40		
Oct. 4	13 46	55·6	..	85 21 50	222 23 25	0	..	S. B. B.	5·510	0 51 50		
,, 6	13 44	55·6	..	85 22 55	222 23 10	0	..	G. S. J.	5·637	0 53 10		
,, 9	14 28	55·6	..	85 24 35	222 23 50	0	..	S. B. B.	5·750	0 54 10		
,, 11	13 44	55·6	..	85 23 40	222 23 35	0	..	G. S. J.	6·690	0 53 30		
,, 13	13 48	55·6	..	85 23 30	222 24 10	0	..	S. B. B.	5·595	0 52 45		
,, 16	14 32	55·6	..	85 23 55	222 23 30	0	..	G. S. J.	5·715	0 53 50	5·673	0 53 24
,, 18	13 30	55·6	..	85 24 0	222 24 0	0	..	S. B. B.	5·710	0 53 55		
,, 20	13 44	55·6	..	85 24 15	222 23 45	0	..	G. S. J.	5·735	0 53 55		
,, 25	13 45	55·6	..	85 23 30	222 24 5	0	..	G. S. J.	5·635	0 52 50		
,, 27	13 22	55·6	..	85 24 40	222 24 0	0	..	S. B. B.	5·745	0 54 5		
,, 30	13 44	55·6	..	85 23 50	222 23 50	0	..	G. S. J.	5·680	0 53 25		
Nov. 1	13 52	55·6	..	85 24 45	222 24 0	0	..	S. B. B.	5·702	0 54 10		
,, 3	14 12	55·6	..	85 24 45	222 23 50	0	..	G. S. J.	5·735	0 54 20		
,, 6	14 13	55·6	..	85 25 15	222 24 10	0	..	S. B. B.	5·755	0 54 30		
,, 8	14 18	55·6	..	85 24 20	222 23 45	0	..	G. S. J.	5·710	0 54 0		
,, 10	14 32	55·6	..	85 23 40	222 24 10	0	..	A.	5·640	0 52 0		
,, 13	13 45	55·6	..	85 24 15	222 23 40	0	..	G. S. J.	5·720	0 54 0		
,, 15	13 44	55·6	..	85 23 40	222 23 35	0	..	A.	5·650	0 53 30	5·699	0 53 52
,, 17	13 45	55·6	..	85 24 10	222 23 35	0	..	G. S. J.	5·705	0 54 0		
,, 20	14 16	55·6	..	85 24 20	222 23 30	0	..	A.	5·725	0 54 15		
,, 22	13 44	55·6	..	85 23 30	222 23 15	0	..	G. S. J.	5·670	0 53 40		
,, 24	14 24	55·6	..	85 23 40	222 23 25	0	..	A.	5·700	0 53 40		
,, 27	13 44	55·6	..	85 23 15	222 22 50	0	..	G. S. J.	5·710	53 50		
,, 29	13 50	55·6	..	85 23 0	222 23 5	0	..	A.	5·670	0 53 20		
Dec. 1	13 44	55·6	..	85 22 45	222 22 55	0	..	G. S. J.	5·640	0 53 15		
,, 4	13 1	55·6	..	85 23 45	222 23 20	0	..	A.	5·680	0 53 50		
,, 6	13 44	55·6	..	85 22 10	222 23 0	0	..	G. S. J.	5·600	0 52 35		
,, 8	13 38	55·6	..	85 23 15	222 23 25	0	..	A.	5·670	0 53 15		
,, 11	13 44	55·6	..	85 26 25	222 23 5	0	..	G. S. J.	6·020	0 56 45		
,, 13	13 44	55·6	..	85 22 50	222 23 0	0	..	A.	5·657	0 53 15	5·696	0 53 29
,, 15	13 45	55·6	..	85 23 35	222 23 10	0	..	G. S. J.	5·737	0 53 50		
,, 18	13 50	55·6	..	85 23 10	222 23 35	0	..	A.	5·680	0 53 0		
,, 20	13 44	55·6	..	85 23 10	222 23 0	0	..	G. S. J.	5·740	0 53 35		
,, 22	13 43	55·6	..	85 22 45	222 23 15	0	..	A.	5·630	0 52 55		
,, 27	14 0	55·6	..	85 22 55	222 23 10	0	..	A.	5·680	0 53 10		
,, 29	13 44	55·6	..	85 21 45	222 22 45	0	..	G. S. J.	5·620	0 52 25		

The mean * observed Declination for the year 1911 = 0° 53′ 59″.

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table IIb.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1911.

Taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.)

1911. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Mean Readings. Collimator Magnet. Scale apparently Inverted.	Mean Readings. Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Mean Readings. Horizontal Circle with Telescope pointed to. Kennery Light House.	Torsion. Mean.	Torsion. Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	Monthly Mean. *Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″		Sc. div.		Cms.	° ′ ″	Cms.	° ′ ″
JAN. 5	12 55	34·05	33·37	276 24 5	53 23 5	0	..	G. S. J.	5·875	0 55 4	5·874	0 55 4
„ 12	12 41	34·00	33·52	276 23 55	53 22 20	0	..	G. S. J.	5·920	0 55 28		
„ 19	13 0	34·02	33·70	276 24 25	53 22 30	0	..	W. V. N.	5·890	0 55 38		
„ 26	12 35	34·00	33·75	276 22 50	53 22 25	0	..	W. V. N.	5·811	0 54 7		
FEB. 2	12 29	34·00	33·70	276 23 30	53 22 10	0	..	W. V. N.	5·893	0 55 2	5·904	0 55 3
„ 9	12 12	33·95	33·77	276 23 40	53 22 15	0	..	W. V. N.	5·928	0 55 0		
„ 16	13 3	33·95	34·27	276 24 50	53 22 45	0	..	W. V. N.	5·910	0 55 12		
„ 23	12 25	34·00	34·30	276 24 20	53 22 30	0	..	W. V. N.	5·886	0 54 58		
MARCH 2	12 44	34·00	34·60	276 25 30	53 22 30	0	..	W. V. N.	5·981	0 55 51	5·850	0 54 23
„ 9	12 29	34·00	34·37	276 19 55	53 19 40	0	..	W. V. N.	5·780	0 53 19		
„ 17	12 52	34·00	34·12	276 20 10	53 19 0	0	..	W. V. N.	5·880	0 54 28		
„ 31	11 43	34·00	33·92	276 23 40	53 23 15	0	..	G. S. J.	5·761	0 53 55		
APRIL 6	12 27	33·92	33·95	276 22 50	53 23 10	0	..	G. S. J.	5·673	0 53 4	5·694	0 53 28
„ 13	12 40	33·95	34·15	276 25 10	53 22 55	0	..	G. S. J.	5·895	0 55 29		
„ 20	12 46	33·92	34·12	276 23 25	53 23 15	0	..	G. S. J.	5·696	0 53 34		
„ 27	12 33	33·95	34·17	276 21 5	53 22 30	0	..	G. S. J.	5·512	0 51 47		
MAY 4	12 51	34·05	33·95	276 21 40	53 22 35	0	..	G. S. J.	5·569	0 52 36	5·641	0 53 0
„ 11	12 36	34·02	34·25	276 22 55	53 22 40	0	..	G. S. J.	5·648	0 53 27		
„ 18	13 3	34·00	34·25	276 22 45	53 22 40	0	..	G. S. J.	5·649	0 53 16		
„ 23	10 37	34·00	34·35	276 24 30	53 23 30	0	..	S. B. B.	5·798	0 54 6		
„ 25	11 3	34·00	34·17	276 22 25	53 23 10	0	..	G. S. J.	5·609	0 52 31		
„ 27	10 27	34·00	34·40	276 23 5	53 22 50	0	..	S. B. B.	5·683	0 53 17		
„ 30	11 5	33·95	34·20	276 21 15	53 22 40	0	..	G. S. J.	5·529	0 51 46		
JUNE 1	10 35	34·02	33·92	276 22 25	53 22 55	0	..	S. B. B.	5·675	0 53 1	5·657	0 53 19
„ 6	10 32	34·00	34·20	276 24 5	53 22 50	0	..	S. B. B.	5·747	0 54 29		
„ 8	11 5	33·97	34·15	276 22 55	53 23 10	0	..	G. S. J.	5·602	0 53 0		
„ 10	10 34	34·00	34·15	276 22 15	53 22 35	0	..	S. B. B.	5·600	0 52 57		
„ 15	10 37	33·90	34·12	276 23 55	53 23 10	0	..	S. B. B.	5·72[illegible]	0 53 57		
„ 17	10 35	34·00	34·10	276 22 35	53 23 0	0	..	G. S. J.	5·605	0 52 54		
„ 20	10 29	33·95	34·15	276 22 10	53 23 0	0	..	S. B. B.	5·660	0 52 24		
„ 24	11 12	34·00	34·05	276 22 15	53 22 30	0	..	S. B. B.	5·577	0 53 8		
„ 27	10 51	34·00	34·10	276 23 40	53 23 5	0	..	G. S. J.	5·680	0 53 54		
„ 29	10 41	33·90	34·32	276 23 25	53 23 0	0	..	S. B. B.	5·705	0 53 26		
JULY 1	10 51	33·82	34·17	276 25 15	53 23 15	0	..	G. S. J.	5·812	0 55 6	5·673	0 53 10
„ 4	10 47	33·90	34·39	276 23 10	53 22 35	0	..	S. B. B.	5·687	0 53 32		
„ 6	11 6	33·85	34·15	276 22 40	53 22 40	0	..	G. S. J.	5·657	0 53 9		
„ 8	11 25	34·00	34·10	276 22 50	53 23 15	0	..	G. S. J.	5·635	0 52 54		
„ 11	10 29	34·00	34·15	276 22 50	53 23 15	0	..	S. B. B.	5·670	0 52 52		
„ 13	10 31	33·80	34·30	276 22 55	53 23 30	0	..	S. B. B.	5·636	0 52 21		
„ 15	11 26	33·92	34·07	276 22 50	53 23 15	0	..	G. S. J.	5·651	0 52 52		
„ 18	11 13	33·97	34·30	276 22 40	53 23 25	0	..	S. B. B.	5·646	0 52 22		
„ 20	10 34	33·90	34·15	276 23 50	53 23 35	0	..	G. S. J.	5·683	0 53 26		
„ 22	10 42	34·00	34·11	276 22 10	53 23 10	0	..	S. B. B.	5·578	0 52 19		
„ 25	10 47	33·90	34·05	276 23 45	53 23 10	0	..	G. S. J.	5·766	0 53 52		
„ 27	10 42	33·95	34·47	276 23 10	53 23 15	0	..	S. B. B.	5·627	0 52 50		
„ 29	11 6	34·00	34·42	276 23 55	53 23 20	0	..	G. S. J.	5·695	0 53 36		
AUG. 1	10 11	33·99	34·20	276 23 55	53 23 5	0	..	S. B. B.	5·814	0 54 4	5·637	0 52 17
„ 3	11 5	34·05	33·97	276 21 40	53 23 15	0	..	G. S. J.	5·566	0 51 55		
„ 5	10 48	34·05	34·34	276 22 35	53 23 30	0	..	S. B. B.	5·579	0 52 14		
„ 8	11 4	33·77	34·55	276 23 5	53 22 50	0	..	G. S. J.	5·678	0 52 55		
„ 10	10 44	33·75	34·45	276 22 20	53 23 17	0	..	S. B. S.	5·585	0 51 48		
„ 12	11 11	33·70	34·37	276 22 25	53 23 15	0	..	G. S. J.	5·615	0 51 57		
„ 15	10 34	33·80	34·35	276 22 20	53 23 15	0	..	S. B. B.	5·620	0 51 59		
„ 19	11 4	33·80	33·97	276 21 30	53 23 15	0	..	S. B. B.	5·551	0 51 31		

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

1911. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Scale apparently Inverted.	Horizontal Circle with Telescope pointed to: Scale of Collimator Magnet.	Kennery Light House.	Torsion. Mean.	Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	*Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		Cms.	° ′ ″	Cms.	° ′ ″
Aug. 22	10 56	34·05	33·97	276 21 55	53 23 15	0	..	G. S. J.	5·656	0 52 10		
„ 24	10 23	33·97	34·05	276 22 55	53 23 30	0	..	S. B. B.	5·721	0 52 45		
„ 26	10 52	33·85	34·20	276 21 35	53 23 10	0	..	G. S. J.	5·579	0 51 31		
„ 31	10 57	33·95	34·00	276 22 20	53 23 10	0	..	G. S. J.	5·690	0 52 33		
Sept. 2	12 15	34·07	33·82	276 20 15	53 23 10	0	..	S. B. B.	5·442	0 50 44		
„ 5	10 59	33·95	34·05	276 21 15	53 23 5	0	..	G. S. J.	5·626	0 51 9		
„ 7	10 50	33·99	34·12	276 21 40	53 23 10	0	..	S. B. B.	5·660	0 51 48		
„ 9	11 21	34·00	34·00	276 21 35	53 23 30	0	..	G. S. J.	5·640	0 51 30		
„ 14	10 21	33·80	34·60	276 23 35	53 23 25	0	..	S. B. B.	5·712	0 52 49		
„ 16	10 32	34·00	34·05	276 21 35	53 23 10	0	..	S. B. B.	5·600	0 51 48		
„ 19	11 3	33·96	34·07	276 22 15	53 23 35	0	..	G. S. J.	5·610	0 51 59	5·649	0 52 0
„ 21	12 8	34·05	34·07	276 22 5	53 23 20	0	..	S. B. B.	5·647	0 52 9		
„ 23	11 41	34·12	34·10	276 21 35	53 23 40	0	..	G. S. J.	5·627	0 51 21		
„ 26	10 21	34·05	34·20	276 23 5	53 23 30	0	..	S. B. B.	5·795	0 52 52		
„ 28	10 28	34·20	33·90	276 23 25	53 23 30	0	..	G. S. J.	5·812	0 53 36		
„ 30	10 11	33·80	34·15	276 22 25	53 23 40	0	..	S. B. B.	5·620	0 51 51		
Oct. 3	10 50	33·94	34·15	276 22 45	53 23 10	0	..	G. S. J.	5·680	0 52 29		
„ 5	10 33	33·77	34·30	276 22 55	53 23 30	0	..	S. B. B.	5·720	0 52 20		
„ 7	11 9	34·00	34·00	276 22 25	53 23 30	0	..	G. S. J.	5·643	0 52 20		
„ 10	10 18	33·80	34·60	276 22 45	53 23 20	0	..	S. B. B.	5·678	0 52 4		
„ 12	11 17	33·95	34·10	276 22 15	53 23 30	0	..	G. S. J.	5·631	0 52 2		
„ 14	10 54	34·00	34·22	276 22 35	53 23 25	0	..	S. B. B.	5·685	0 52 22	5·644	0 52 1
„ 17	10 55	33·97	34·45	276 21 45	53 23 30	0	..	G. S. J.	5·565	0 51 12		
„ 19	11 4	34·10	33·92	276 21 45	53 23 30	0	..	S. B. B.	5·612	0 51 50		
„ 26	10 23	34·00	34·27	276 22 20	53 23 40	0	..	G. S. J.	5·638	0 51 50		
„ 28	10 58	34·12	34·00	276 21 35	53 22 35	0	..	S. B. B.	5·642	0 52 32		
„ 31	10 58	33·97	34·10	276 21 25	53 23 30	0	..	G. S. J.	5·585	0 51 13		
Nov. 2	11 10	33·90	34·30	276 20 45	53 23 30	0	..	S. B. B.	5·502	0 50 17		
„ 4	11 35	33·95	33·72	276 22 0	53 23 50	12E	1·19	G. S. J.	5·565	0 51 30		
„ 7	10 54	34·07	34·27	276 20 30	53 23 30	0	..	A.	5·507	0 50 14		
„ 9	11 8	34·07	33·99	276 22 15	53 23 35	0	..	G. S. J.	5·630	0 52 10		
„ 11	11 48	34·00	33·87	276 21 40	53 23 30	0	..	A.	5·625	0 51 42		
„ 14	10 50	33·97	34·10	276 22 25	53 23 50	0	..	G. S. J.	5·642	0 51 53		
„ 16	10 54	34·00	34·42	276 21 50	53 23 20	0	..	A.	5·602	0 51 31	5·560	0 51 9
„ 18	10 59	33·97	34·17	276 20 55	53 23 35	0	..	G. S. J.	5·520	0 50 34		
„ 21	10 50	34·02	34·12	276 20 35	53 23 10	0	..	A.	5·530	0 50 44		
„ 23	11 12	34·07	34·12	276 20 45	53 23 15	0	..	G. S. J.	5·517	0 50 53		
„ 25	11 14	34·00	34·10	276 20 35	53 23 0	0	..	A.	5·522	0 50 54		
„ 28	11 14	33·92	34·40	276 21 20	53 22 55	0	..	G. S. J.	5·595	0 51 22		
„ 30	11 28	34·05	34·35	276 21 10	53 23 5	0	..	A.	5·520	0 51 13		
Dec. 2	11 43	33·95	34·22	276 22 30	53 23 5	0	..	G. S. J.	5·666	0 52 35		
„ 5	11 12	34·20	33·90	276 20 50	53 23 40	0	..	A.	5·506	0 50 52		
„ 9	11 20	33·97	34·22	276 20 35	53 23 20	0	..	A.	5·515	0 50 26		
„ 14	11 10	34·02	34·07	276 20 10	53 22 40	0	..	A.	5·590	0 50 53		
„ 16	11 34	33·95	34·05	276 20 35	53 23 5	0	..	G. S. J.	5·566	0 50 49		
„ 19	11 29	33·97	33·82	276 19 55	53 22 50	0	..	A.	5·480	0 50 38	5·556	0 50 50
„ 21	11 11	33·95	34·20	276 20 5	53 23 10	0	..	G. S. J.	5·513	0 50 6		
„ 23	11 24	33·92	34·32	276 21 35	53 23 0	0	..	A.	5·688	0 51 37		
„ 26	11 22	34·02	34·17	276 21 35	53 23 35	0	..	G. S. J.	5·602	0 51 17		
„ 28	10 30	33·90	34·37	276 20 45	53 23 45	0	..	A.	5·525	0 49 59		
„ 30	11 37	34·02	34·07	276 19 45	53 23 10	0	..	G. S. J.	5·470	0 49 58		

* The Mean observed Declination for the year 1911 = 0° 52′ 59″.

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*,

Absolute Magnetical Observations, Alibag—Table IIIa.

OBSERVATIONS OF INCLINATION.

Taken with Inductor No. 41 by Schulze and Galvanometer No. 200 by Plath.

1911. Date.	Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	*Monthly mean Inclination. °	′
JAN. 7	12	47	13	25	G. S. J. and B. P.	23	42·57	23	43·00	23	42·78		
,, 14	12	27	12	50	B. P. and G. S. J.	23	44·10	23	44·53	23	44·31		
,, 21	12	45	13	31	W. V. N. and B.P.	23	43·50	23	43·78	23	43·64	23	44·01
,, 28	12	55	13	37	B.P. and W. V. N.	23	45·21	23	45·41	23	45·31		
FEB. 4	12	44	13	15	W. V. N. and B.P.	23	44·45	23	43·76	23	44·10		
,, 11	12	45	13	25	B.P. and W. V. N.	23	43·96	23	44·54	23	44·25		
,, 18	12	54	13	33	W. V. N. and B.P.	23	45·15	23	45·60	23	45·37	23	44·88
,, 25	12	38	13	9	B.P. and W. V. N.	23	45·42	23	46·16	23	45·79		
MARCH 3	14	53	15	26	W. V. N. and B.P.	23	46·68	23	46·73	23	46·70		
,, 7	12	43	13	6	B.P. and W. V. N.	23	44·78	23	44·62	23	44·70		
,, 10	14	37	15	3	B.P. and W. V. N.	23	45·38	23	45·55	23	45·46		
,, 15	12	46	13	7	W. V. N. and B.P.	23	45·05	23	44·12	23	44·58		
,, 17	14	20	14	47	W. V. N. and B.P.	23	45·26	23	44·88	23	45·07	23	45·08
,, 21	12	55	13	30	B P. and W. V. N.	23	45·23	23	46·86	23	46·04		
,, 24	15	12	15	45	W. V. N. and B.P.	23	46·62	23	44·65	23	45·53		
,, 29	13	17	13	44	B.P and W. V. N.	23	44·14	23	44·39	23	44·26		
,, 31	15	15	15	43	G. S. J. and B. P.	23	43·56	23	43·27	23	43·41		
APRIL 4	12	30	12	48	B. P. and G. S. J.	23	43·50	23	44·24	23	43·87		
,, 7	14	32	15	11	G. S. J. and B. P.	23	43·58	23	42·71	23	43·14		
,, 14	14	46	15	15	B. P. and G. S. J.	23	46·28	23	45·47	23	45·87		
,, 15	12	37	13	10	G. S. J. and B. P.	23	43·61	23	43·03	23	43·32		
,, 18	12	47	13	11	B. P. and G. S. J.	23	45·77	23	45·61	23	45·69	23	44·87
,, 21	14	28	15	4	G. S. J. and B. P.	23	46·74	23	46·65	23	46·69		
,, 25	12	45	13	14	B. P. and G. S. J.	23	44·10	23	44·28	23	44·19		
,, 28	14	50	15	24	G. S. J. and B. P.	23	45·69	23	46·72	23	46·20		
MAY 2	12	47	13	15	B. P. and G. S. J.	23	45·64	23	46·30	23	45·97		
,, 5	14	36	15	6	G. S. J. and B. P.	23	45·24	23	45·62	23	45·43		
,, 9	12	53	13	22	B. P. and G. S. J.	23	46·00	23	46·62	23	46·31		
,, 12	14	30	14	56	G. S. J. and B. P.	23	45·61	23	45·70	23	45·65		
,, 16	12	39	13	8	B. P. and G. S. J.	23	46·06	23	46·41	23	46·23		
,, 19	13	22	13	51	G. S. J. and B. P.	23	46·14	23	46·25	23	6·19		
,, 20	13	27	14	6	G.S.J. and S.B.B.	23	46·21	23	46·29	23	46·25		
,, 22	11	52	12	24	G. S. J. and B. P.	23	44·74	23	45·41	23	45·07	23	45·90
,, 23	14	52	15	21	G.S.J. and S.B.B.	23	46·78	23	46·94	23	46·86		
,, 24	11	58	12	16	B. P. and S. B. B.	23	44·53	23	44·81	23	44·67		
,, 25	15	12	15	46	S.B.B. and G.S.J.	23	46·52	23	46·72	23	46·62		
,, 26	12	4	12	32	B. P. and G. S. J.	23	44·21	23	44·32	23	44·26		
,, 27	14	47	15	16	G.S.J. and S.B.B.	23	47·57	23	48·18	23	47·87		
,, 29	13	9	13	36	G.S.J. and S.B.B.	23	44·63	23	45·18	23	44·90		
,, 30	15	1	15	28	G.S.J. and S.B.B.	23	46·60	23	46·70	23	46·65		
,, 31	12	4	12	29	B. P. and G. S. J.	23	45·32	23	45·64	23	45·48		
JUNE 1	14	53	15	27	G.S.J. and S.B.B.	23	48·62	23	49·28	23	48·95		
,, 2	12	55	13	21	G.S.J. and S.B.B.	23	46·57	23	46·56	23	46·56		
,, 3	14	45	15	22	S.B.B. and G.S.J.	23	46·74	23	48·46	23	47·60		
,, 5	12	7	12	42	G. S. J. and B. P.	23	46·26	23	46·61	23	46·43		
,, 6	14	46	15	17	G.S.J. and S.B.B.	23	48·11	23	48·82	23	48·46		
,, 7	12	25	12	54	S. B. B. and B. P.	23	45·70	23	44·86	23	45·28		
,, 8	14	58	15	23	G.S.J. and S.B.B.	23	49·21	23	48·48	23	48·84		
,, 9	12	30	13	2	G. S. J. and B. P.	23	45·90	23	46·47	23	46·18		
,, 10	14	40	15	4	G.S.J. and S.B.B.	23	47·42	23	48·27	23	47·84		
,, 12	13	45	14	26	S. B. B. and B. P.	23	44·32	23	50·06	23	47·19		
,, 13	14	48	15	26	G.S.J. and S.B.B.	23	47·80	23	48·90	23	48·35		
,, 14	11	43	12	27	G. S. J. and B. P.	23	45·39	23	45·44	23	45·41		
,, 15	14	35	15	6	G.S.J. and S.B.B.	23	47·09	23	48·41	23	47·75	23	46·93
,, 16	11	44	12	18	S. B. B. and B. P.	23	45·81	23	45·97	23	45·89		
,, 17	14	23	14	50	G.S.J. and S.B.B.	23	47·91	23	48·45	23	48·18		
,, 19	12	8	12	43	G.S.J. and S.B.B.	23	44·81	23	46·46	23	45·63		
,, 20	14	27	15	0	G.S.J. and S.B.B.	23	47·25	23	48·29	23	47·77		
,, 21	11	22	12	8	S. B. B. and B. P.	23	45·01	23	45·13	23	45·07		
,, 22	10	26	10	41	B. P. and S. B. B.	23	45·93	23	46·65	23	46·29		
,, 23	11	22	11	57	G. S. J. and B. P.	23	45·30	23	46·47	23	45·88		
,, 24	14	20	14	43	G.S.J. and S.B.B.	23	46·93	23	48·78	23	47·85		
,, 26	13	0	13	24	G.S.J. and S.B.B.	23	46·33	23	48·01	23	47·17		
,, 27	14	8	14	41	S.B.B. and G.S.J.	23	45·83	23	46·75	23	46·29		
,, 28	11	24	11	50	G. S. J. and B. P.	23	44·45	23	45·33	23	44·89		
,, 29	14	13	14	47	G.S.J. and S.B.B.	23	48·19	23	48·54	23	48·36		
,, 30	12	56	13	25	G.S.J. and S.B.B.	23	44·53	23	47·40	23	45·96		

*The monthly and annual means corrected for diurnal variation appear in Table VIII.

The temporary pillar on which the Inductor was mounted was a wooden one and not isolated from the floor of the observation room. The somewhat large differences occasionally noted during this year, in the results for face East and face West, are probably in the main due to level changes on this account.

1911. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	*Monthly mean Inclination. °	′
JULY	1	14	13	14	35	S.B.B. and G.S.J.	23	45·22	23	46·66	23	45·94		
,,	3	11	15	11	41	G. S. J. and B. P.	23	46·00	23	46·18	23	46·09		
,,	4	14	7	14	35	G.S.J. and S.B.B.	23	46·15	23	48·12	23	47·13		
,,	5	11	45	11	35	S. B. B. and B. P.	23	44·72	23	46·04	23	45·38		
,,	6	14	28	14	52	S. B. B. and B. P.	23	47·43	23	48·76	23	48·09		
,,	7	11	7	11	31	G.S.J. and S.B.B.	23	45·75	23	46·73	23	46·24		
,,	8	14	36	15	2	G. S. J. and B. P.	23	48·86	23	49·21	23	49·03		
,,	10	11	50	12	13	S. B. B. and B. P.	23	47·06	23	46·94	23	47·00		
,,	11	14	21	15	7	G.S.J. and S.B.B.	23	48·00	23	54·26	23	51·13		
,,	12	11	42	12	20	G. S. J. and B. P.	23	54·36	23	47·15	23	50·75		
,,	13	14	1	14	35	G S.J. and S.B.B.	23	47·86	23	49·88	23	48·87		
,,	14	11	34	11	58	S. B. B. and B. P.	23	46·02	23	46·09	23	46·05		
,,	15	13	56	14	22	G.S.J. and S.B.B.	23	46·75	23	48·27	23	47·51	3	47·94
,,	17	11	33	12	10	G. S. J. and B. P.	23	45·47	23	46·40	23	45·93		
,,	18	14	10	14	43	G.S.J. and S.B.B.	23	50·11	23	52·05	23	51·08		
,,	19	11	6	11	31	S. B. B. and B. P.	23	46·83	23	48·42	23	47·62		
,,	20	13	50	14	22	G.S.J. and S.B.B.	23	49·74	23	49·84	23	49·79		
,,	21	11	10	11	38	G. S. J. and B P.	23	47·67	23	48·30	23	47·98		
,,	22	13	57	14	38	G.S.J. and S.B.B.	23	50·72	23	50·85	23	50·78		
,,	24	12	54	13	20	G.S.J. and S.B.B.	23	47·13	23	48·60	23	47·86		
,,	25	13	53	14	19	G.S.J. and S.B.B.	23	49·08	23	49·06	23	49·07		
,,	26	11	28	12	1	G. S. J. and B. P.	23	46·58	23	47·82	23	47·20		
,,	27	14	0	14	31	G.S.J. and S.B.B.	23	46·62	23	48·72	23	47·67		
,,	28	12	53	13	23	G.S.J. and S.B.B.	23	46·50	23	46·49	23	46·49		
,,	29	13	53	14	11	G.S.J. and S.B.B.	23	49·45	23	48·94	23	49·19		
,,	31	11	22	11	50	G.S.J. and S.B.B.	23	46·39	23	46·93	23	46·66		
AUG.	1	14	29	14	55	G.S.J. and S.B.B.	23	48·35	23	50·72	23	49·53		
,,	2	11	31	11	51	S. B. B. and B. P.	23	47·38	23	49·34	23	48·36		
,,	3	13	54	14	19	G.S.J. and S.B.B.	23	46·45	23	49·06	23	47·75		
,,	4	11	37	12	3	G. S. J. and B. P.	23	45·55	23	47·84	23	46·69		
,,	5	13	58	14	28	G.S.J. and S.B.B.	23	49·82	23	50·18	23	50·00		
,,	7	11	36	11	57	S. B. B. and B. P.	23	47·15	23	46·19	23	46·67		
,,	8	13	43	14	3	G.S.J. and S.B.B.	23	46·93	23	49·07	23	48·00		
,,	9	10	48	11	16	G.S.J. and S.B.B.	23	45·27	23	45·32	23	45·29		
,,	10	15	4	15	42	G.S.J. and S.B.B.	23	50·41	23	50·62	23	50·51		
,,	11	11	34	11	57	S. B. B. and B. P.	23	44·61	23	44·64	23	44·62		
,,	12	13	55	14	19	G.S.J. and S.B.B.	23	48·07	23	48·70	23	48·38		
,,	14	11	33	11	52	G. S. J. and B. P.	23	46·27	23	46·20	23	46·23		
,,	15	13	58	14	27	G.S.J. and S.B.B.	23	46·22	23	46·46	23	46·34		
,,	16	11	33	11	53	S. B. B. and B. P.	23	46·10	23	47·63	23	46·86	23	47·23
,,	17	10	32	10	59	S. B. B. and B. P.	23	44·66	23	44·80	23	44·73		
,,	18	11	10	11	43	G.S.J. and S.B.B.	23	44·88	23	45·95	23	45·41		
,,	19	14	1	14	42	G.S.J. and S.B.B.	23	45·70	23	48·32	23	47·01		
,,	21	10	40	10	59	S. B. B. and B. P.	23	43·99	23	44·23	23	44·11		
,,	22	13	57	14	29	G.S.J. and S.B.B.	23	46·44	23	48·68	23	47·56		
,,	23	12	4	12	38	G. S. J. and B. P.	23	44·23	23	45·03	23	44·63		
,,	24	13	58	14	33	G.S.J. and S.B.B.	23	49·16	23	47·61	23	48·38		
,,	25	11	13	11	45	G.S.J. and S.B.B.	23	45·78	23	46·13	23	45·95		
,,	26	14	1	14	28	G.S.J. and S.B.B.	23	48·67	23	51·02	23	49·84		
,,	28	11	58	12	16	S. B. B. and B. P.	23	48·85	23	48·68	23	48·76		
,,	31	14	36	14	59	G.S.J. and S.B.B.	23	48·66	23	49·75	23	49·20		
SEPT.	1	11	22	11	53	G. S. J. and B. P.	23	47·44	23	50·29	23	48·86		
,,	2	14	28	14	54	G.S.J. and S.B.B.	23	48·35	23	49·85	23	49·10		
,,	4	10	45	11	8	S. B. B. and B. P.	23	47·85	23	47·71	23	47·78		
,,	5	13	52	14	18	G.S.J. and S.B.B.	23	48·10	23	48·33	23	48·21		
,,	6	11	35	12	10	G. S. J. and B. P.	23	46·73	23	48·52	23	47·62		
,,	7	14	2	14	43	G.S.J. and S.B.B.	23	47·06	23	48·32	23	47·69		
,,	8	11	6	11	27	S. B. B. and B. P.	23	46·92	23	49·07	23	47·99		
,,	9	14	6	15	3	G.S.J. and S.B.B.	23	48·99	23	50·16	23	49·57		
,,	11	11	39	12	7	G. S. J. and B. P.	23	46·74	23	49·35	23	48·04		
,,	12	12	10	12	28	S. B. B. and B. P.	23	47·97	23	46·54	23	47·25		
,,	13	13	33	14	1	S. B. B. and B. P.	23	47·63	23	47·87	23	47·75		
,,	14	13	12	13	44	S. B. B. and B. P.	23	46·53	23	50·10	23	48·31		
,,	15	11	50	12	21	G. S. J. and B. P.	23	47·03	23	49·19	23	48·11	23	49·01
,,	16	13	58	14	24	G.S.J. and S.B.B.	23	52·10	23	53·16	23	52·63		
,,	18	11	6	11	34	G.S.J. and S.B.B.	23	47·20	23	49·38	23	48·29		
,,	19	16	26	16	48	G.S.J. and S.B.B.	23	49·87	23	50·23	23	50·05		
,,	20	12	26	13	41	G. S. J. and B. P.	23	50·13	23	54·64	23	52·38		
,,	21	14	35	15	7	G.S.J. and S.B.B.	23	55·82	23	54·27	23	55·04		
,,	22	12	31	12	48	S. B. B. and B. P.	23	51·51	23	49·59	23	50·55		
,,	23	13	56	14	15	G.S.J. and S.B.B.	23	51·48	23	52·83	23	52·15		
,,	25	11	53	12	19	G. S. J. and B. P.	23	46·46	23	50·43	23	48·44		
,,	26	13	57	14	36	G.S.J. and S.B.B.	23	47·16	23	50·05	23	48·60		
,,	27	11	33	12	5	S. B. B. and B. P.	23	45·83	23	46·20	23	46·01		
,,	28	14	8	14	29	G.S.J. and S.B.B.	23	49·34	23	47·88	23	48·61		
,,	29	10	46	11	3	S. B. B. and B. P.	23	46·56	23	48·66	23	47·61		
,,	30	14	18	14	44	G.S.J. and S.B.B.	23	47·54	23	47·89	23	47·71		

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1911. Date.	Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	*Monthly mean Inclination. °	′
Oct. 2	12	10	12	31	G.S.J. and S.B.B.	23	46·47	23	44·49	23	45·48		
,, 3	13	53	14	22	G.S.J. and S.B.B.	23	48·99	23	49·45	23	49·22		
,, 4	11	32	11	57	G. S. J. and B. P.	23	54·14	23	47·63	23	50·88		
,, 5	14	1	14	23	G.S.J. and S.B.B.	23	46·17	23	47·33	23	46·75		
,, 6	10	56	11	20	S. B. B. and B. P.	23	48·01	23	47·14	23	47·57		
,, 7	13	58	14	26	G.S.J. and S.B.B.	23	46·49	23	50·40	23	48·44		
,, 9	12	14	12	46	G.S.J. and S.B.B.	23	46·92	23	48·65	23	47·78		
,, 10	13	52	14	23	G.S.J. and S.B.B.	23	46·43	23	49·26	23	47·84		
,, 11	11	40	12	1	S. B. B. and B. P.	23	47·87	23	47·81	23	47·84		
,, 12	13	53	14	18	G.S.J. and S.B.B.	23	46·07	23	48·22	23	47·14		
,, 13	12	12	12	40	G. S. J. and B. P.	23	46·77	23	45·53	23	46·15		
,, 14	13	52	14	22	G.S.J. and S.B.B.	23	46·49	23	48·31	23	47·40		
,, 16	10	44	11	5	S. B. B. and B. P.	23	47·41	23	47·31	23	47·36	23	47·72
,, 17	14	1	14	42	G.S.J. and S.B.B.	23	49·57	23	49·74	23	49·65		
,, 18	11	30	11	51	G. S. J. and B. P.	23	47·97	23	47·61	23	47·79		
,, 19	14	2	14	26	G.S.J. and S.B.B.	23	48·60	23	49·02	23	48·81		
,, 20	11	50	12	23	S. B. B. and B. P.	23	45·98	23	45·69	23	45·83		
,, 21	12	36	12	55	G.S.J. and S.B.B.	23	48·06	23	48·28	23	48·17		
,, 23	10	52	11	25	S. B. B. and B. P.	23	46·95	23	46·58	23	46·76		
,, 24	12	8	12	22	G.S.J. and S.B.B.	23	47·50	23	48·64	23	48·07		
,, 25	11	3	11	22	S. B. B. and B. P.	23	46·16	23	47·88	23	47·02		
,, 26	13	52	14	8	G.S.J. and S.B.B.	23	49·37	23	51·07	23	50·22		
,, 27	11	16	11	39	G. S. J. and B. P.	23	46·42	23	46·74	23	46·58		
,, 28	14	14	14	54	G.S.J. and S.B.B.	23	47·41	23	48·20	23	47·80		
,, 30	11	44	12	2	S. B. B. and B. P.	23	50·12	23	46·20	23	48·16		
,, 31	14	6	14	22	G.S.J. and S.B.B.	23	45·16	23	46·64	23	45·90		
Nov. 1	11	45	12	23	G. S. J. and B. P.	23	45·30	23	46·67	23	45·98		
,, 2	14	26	15	8	G.S.J. and S.B.B.	23	45·97	23	46·69	23	46·33		
,, 3	11	40	12	8	S. B. B. and B. P.	23	49·97	23	50·06	23	50·01		
,, 4	14	15	14	31	G.S.J. and S.B.B.	23	48·95	23	49·71	23	49·33		
,, 6	12	7	12	31	G. S. J. and A.	23	49·57	23	51·89	23	50·73		
,, 7	14	12	14	40	G. S. J. and A.	23	50·04	23	49·97	23	50·00		
,, 8	12	7	12	30	B. P. and A.	23	49·13	23	49·79	23	49·46		
,, 9	14	3	14	31	G. S. J. and A.	23	47·58	23	50·03	23	48·80		
,, 10	11	37	12	1	G. S. J. and B. P.	23	48·82	23	49·35	23	49·08		
,, 11	14	38	15	2	G. S. J. and A.	23	49·79	23	52·11	23	50·95		
,, 13	11	22	11	52	B. P. and A.	23	50·82	23	50·30	23	50·56		
,, 14	14	18	14	51	G. S. J. and A.	23	50·01	23	52·13	23	51·07		
,, 15	11	24	11	47	G. S. J. and B. P.	23	52·75	23	50·36	23	51·55	23	49·81
,, 16	13	56	14	19	G. S. J. and A.	23	50·16	23	51·10	23	50·63		
,, 17	11	49	12	19	B. P. and A.	23	50·60	23	51·72	23	51·16		
,, 18	13	56	14	15	G. S. J. and A.	23	49·98	23	50·58	23	50·28		
,, 20	12	1	12	27	G. S. J. and B. P.	23	50·56	23	50·66	23	50·61		
,, 21	14	0	14	26	G. S. J. and A.	23	50·77	23	50·42	23	50·59		
,, 22	11	24	11	45	B. P. and A.	23	49·97	23	49·69	23	49·83		
,, 23	13	50	14	7	G. S. J. and A.	23	49·55	23	50·07	23	49·81		
,, 24	10	54	11	8	G. S. J. and B. P.	23	48·33	23	48·00	23	48·16		
,, 25	13	54	14	20	G. S. J. and A.	23	49·92	23	50·62	23	50·27		
,, 27	11	40	11	58	B. P. and A.	23	49·92	23	49·55	23	49·73		
,, 28	13	53	14	19	G. S. J. and A.	23	49·91	23	51·26	23	50·58		
,, 29	11	25	11	54	G. S. J. and B. P.	23	48·65	23	49·80	23	49·22		
,, 30	14	2	14	26	G. S. J. and A.	23	50·13	23	50·71	23	50·42		
Dec. 1	11	56	12	12	B. P. and A.	23	49·47	23	50·84	23	50·15		
,, 2	14	11	14	36	G. S. J. and A.	23	50·46	23	51·62	23	51·04		
,, 4	10	56	11	19	G. S. J. and B. P.	23	49·33	23	51·24	23	50·28		
,, 5	13	55	14	28	G. S. J. and A.	23	50·91	23	52·81	23	51·86		
,, 6	11	37	12	3	B. P. and A.	23	48·78	23	50·57	23	49·67		
,, 7	11	17	11	38	G. S. J. and B. P.	23	49·85	23	51·37	23	50·61		
,, 8	11	27	11	46	G. S. J. and B. P.	23	50·36	23	50·75	23	50·55		
,, 9	13	54	14	19	G. S. J. and A.	23	51·66	23	53·15	23	52·40		
,, 11	11	39	11	58	B. P. and A.	23	53·08	23	55·10	23	54·09		
,, 12	14	17	14	34	G. S. J. and A.	23	52·64	23	53·31	23	52·97		
,, 13	10	52	11	21	G. S. J. and B. P.	23	50·27	23	51·48	23	50·87		
,, 14	13	57	14	24	G. S. J. and A.	23	51·41	23	52·94	23	52·17		
,, 15	11	36	12	16	B. P. and A.	23	50·79	23	52·76	23	51·77		
,, 16	14	17	14	42	G. S. J. and A.	23	51·00	23	53·67	23	52·33	23	51·34
,, 18	11	44	12	9	G. S. J. and B. P.	23	50·98	23	51·65	23	51·31		
,, 19	13	55	14	23	G. S. J. and A.	23	51·88	23	53·59	23	52·73		
,, 20	10	56	11	14	B. P. and A.	23	50·12	23	50·55	23	50·33		
,, 21	13	53	14	8	G. S. J. and A.	23	51·44	23	50·77	23	51·10		
,, 22	11	28	11	46	G. S. J. and B. P.	23	50·01	23	50·53	23	50·27		
,, 23	13	54	14	17	G. S. J. and A.	23	51·43	23	52·26	23	51·84		
,, 25	12	17	12	47	G. S. J. and A.	23	49·81	23	51·31	23	50·56		
,, 26	13	46	14	3	G. S. J. and A.	23	50·52	23	51·05	23	50·78		
,, 27	12	3	12	35	G. S. J. and B. P.	23	51·09	23	51·93	23	51·51		
,, 28	14	2	14	22	G. S. J. and A.	23	52·12	23	52·19	23	52·15		
,, 29	11	13	11	36	B. P. and A.	23	50·58	23	50·56	23	50·57		
,, 30	13	58	14	17	G. S. J. and A.	23	50·73	23	51·27	23	51·00		

* The mean observed Inclination for the year 1911 = 23° 47′·06

*The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table IIIb.

OBSERVATIONS OF INCLINATION, 1911.

Taken with Dip Circle No. 160 (Cambridge Scientific Instrument Co.) and two 3½ inch Needles Nos. 1 and 2 by Dover.

1911. Date.	Alibag Civil Time (0 to 24 hours) At commencement.		At conclusion.		Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.		A. West.		B. Face of Circle. East.		B. West.		Mean Dip.	Monthly Mean for each Needle.	Monthly Mean.
	H.	m.	H.	m.			°	′	°	′	°	′	°	′	° ′	° ′	° ′
JAN 3	11	50	12	45	G. S. J.	1	23	40·6	23	49·1	23	32·9	23	36·6	23 39·8		
„ 3	12	52	13	38	G. S. J.	2	23	37·9	23	47·4	23	31·9	23	43·5	23 40·2		
„ 6	13	53	14	41	G. S. J.	1	23	45·2	23	47·0	23	27·4	23	41·2	23 40·2		
„ 6	14	49	15	34	G. S. J.	2	23	37·6	23	49·0	23	32·2	23	45·9	23 41·2		
„ 10	11	58	12	48	G. S. J.	1	23	45·9	23	52·1	23	31·2	23	36·9	23 41·5		
„ 10	12	56	13	48	G. S. J.	2	23	42·6	23	48·7	23	30·1	23	46·8	23 42·0	No. 1	
„ 13	13	51	14	38	G. S. J.	1	23	48·4	23	50·7	23	35·6	23	34·6	23 42·3	23 40·9	
„ 13	14	46	15	35	G. S. J.	2	23	43·1	23	48·6	23	34·7	23	42·2	23 42·1		
„ 17	11	44	12	35	G. S. J.	1	23	44·4	23	48·6	23	30·1	23	33·6	23 39·2		
„ 17	12	42	13	30	G. S. J.	2	23	37·5	23	45·6	23	34·0	23	40·5	23 39·4		23 41·1
„ 20	13	54	14	42	G. S. J.	1	23	46·6	23	51·2	23	32·7	23	34·6	23 41·3		
„ 20	14	49	15	33	G. S. J.	2	23	40·4	23	47·2	23	35·6	23	40·0	23 40·8	No. 2	
„ 24	11	47	12	40	W. V. N.	1	23	45·0	23	51·5	23	32·7	23	34·6	23 40·9	23 41·3	
„ 24	12	51	13	50	W. V. N.	2	23	40·6	23	49·6	23	32·4	23	43·0	23 41·4		
„ 27	13	55	14	55	W. V. N.	1	23	48·0	23	51·2	23	31·6	23	34·5	23 41·3		
„ 27	15	10	15	50	W. V. N.	2	23	41·6	23	49·5	23	31·6	23	45·4	23 42·0		
„ 31	11	50	12	45	W. V. N.	1	23	47·6	23	48·1	23	33·4	23	36·1	23 41·3		
„ 31	12	55	13	49	W. V. N.	2	23	40·2	23	50·0	23	32·9	23	45·6	23 42·2		
FEB. 3	13	52	14	45	W. V. N.	1	23	47·5	23	48·9	23	35·1	23	40·6	23 43·0		
„ 3	14	58	15	48	W. V. N.	2	23	34·6	23	46·4	23	43·1	23	48·6	23 43·2		
„ 7	11	58	13	1	W. V. N.	1	23	47·2	23	52·4	23	35·1	23	37·5	23 43·0		
„ 7	13	12	13	55	W. V. N.	2	23	41·6	23	51·9	23	35·4	23	45·5	23 43·6		
„ 10	13	52	14	42	W. V. N.	1	23	48·1	23	49·7	23	34·4	23	38·5	23 42·7	No. 1	
„ 10	14	50	15	45	W. V. N.	2	23	43·6	23	51·5	23	37·1	23	45·7	23 44·5	23 42·6	
„ 14	12	3	12	52	W. V. N.	1	23	45·6	23	52·4	23	34·7	23	38·4	23 42·8		
„ 14	13	1	13	46	W. V. N.	2	23	43·1	23	51·2	23	37·9	23	44·9	23 44·3		
„ 17	13	55	14	48	W. V. N.	1	23	47·1	23	55·5	23	31·2	23	39·2	23 43·2		23 43·0
„ 17	14	59	15	45	W. V. N.	2	23	42·4	23	52·7	23	35·0	23	42·1	23 43·0		
„ 21	11	45	12	40	W. V. N.	1	23	44·1	23	53·9	23	28·1	23	37·5	23 40·9	No. 2	
„ 21	12	52	13	48	W. V. N.	2	23	39·2	23	47·6	23	35·9	23	44·1	23 41·7	23 43·4	
„ 24	13	52	14	50	W. V. N.	1	23	46·0	23	52·7	23	33·0	23	39·9	23 42·9		
„ 24	15	0	15	49	W. V. N.	2	23	41·7	23	51·4	23	37·7	23	43·2	23 43·2		
„ 28	12	5	12	55	W. V. N.	1	23	44·0	23	51·6	23	32·5	23	41·5	23 42·4		
„ 28	13	3	13	50	W. V. N.	2	23	43·2	23	50·7	23	40·7	23	40·9	23 43·9		
MARCH 3	13	50	16	5	W. V. N.	2	23	40·5	23	50·9	23	42·0	23	44·7	23 44·5		
„ 4	11	43	13	25	W. V. N.	1	23	43·7	23	54·4	23	32·0	23	40·1	23 42·5		
„ 4	12	10	12	58	W. V. N.	2	23	38·1	23	47·4	23	40·0	23	43·7	23 42·3		
„ 7	11	40	13	40	W. V. N.	1	23	45·1	23	54·4	23	31·9	23	38·2	23 42·4		
„ 10	13	45	15	46	W. V. N.	2	23	39·2	23	50·7	23	39·5	23	44·0	23 43·3		
„ 11	12	2	13	46	W. V. N.	1	23	42·6	23	51·4	23	32·1	23	41·0	23 41·7		
„ 11	12	28	13	13	W. V. N.	2	23	40·9	23	50·1	23	37·9	23	40·7	23 42·4		
„ 12	12	10	12	56	W. V. N.	1	23	43·5	23	53·5	23	30·5	23	41·2	23 42·9		
„ 12	12	22	12	41	W. V. N.	2	23	39·2	23	48·1	23	41·2	23	42·0	23 42·6		
„ 13	9	28	10	13	W. V. N.	1	23	45·6	23	53·5	23	34·5	23	43·5	23 44·3		
„ 13	9	38	10	0	W. V. N.	2	23	41·0	23	51·1	23	40·7	23	42·7	23 43·9	No. 1	
„ 13	16	23	17	2	W. V. N.	1	23	45·4	23	52·1	23	33·0	23	44·0	23 43·6	23 43·9	
„ 13	16	35	16	51	W. V. N.	2	23	40·0	23	54·7	23	39·2	23	41·2	23 43·8		
„ 14	9	1	9	37	W. V. N.	1	23	47·0	23	52·4	23	31·7	23	42·0	23 43·3		
„ 14	9	10	9	28	W. V. N.	2	23	42·1	23	52·5	23	39·7	23	42·0	23 44·1		
„ 15	12	0	13	40	W. V. N.	1	23	44·6	23	54·2	23	32·7	23	40·7	23 43·0		
„ 17	13	38	15	15	W. V. N.	2	23	42·1	23	48·7	23	39·2	23	40·2	23 42·5		23 43·9
„ 18	11	59	13	20	W. V. N.	1	23	46·2	23	58·2	23	30·5	23	38·2	23 43·3		
„ 18	12	17	12	55	W. V. N.	2	23	41·5	23	52·6	23	36·7	23	42·9	23 43·4		
„ 21	12	10	14	0	W. V. N.	1	23	45·5	23	56·0	23	35·0	23	47·0	23 45·9		
„ 22	12	30	13	17	W. V. N.	1	23	45·4	23	55·0	23	30·9	23	45·6	23 44·2		
„ 22	12	42	13	6	W. V. N.	2	23	40·1	23	50·0	23	40·4	23	43·5	23 43·5	No. 2	
„ 22	13	25	14	9	W. V. N.	1	23	33·7	23	46·0	23	45·6	23	54·2	23 44·9	23 43·9	
„ 22	13	36	14	0	W. V. N.	2	23	41·0	23	44·2	23	42·0	23	53·4	23 45·1		
„ 22	15	33	16	23	W. V. N.	1	23	46·9	23	57·5	23	33·5	23	46·2	23 46·0		
„ 22	15	45	16	11	W. V. N.	2	23	44·7	23	53·6	23	40·7	23	45·0	23 46·0		
„ 22	16	25	17	13	W. V. N.	1	23	33·5	23	46·7	23	46·9	23	58·2	23 46·3		
„ 22	16	36	17	2	W. V. N.	2	23	41·7	23	45·2	23	44·0	23	56·9	23 46·5		
„ 24	14	0	16	15	W. V. N.	2	23	41·2	23	54·2	23	41·0	23	44·7	23 45·3		
„ 25	12	37	13	40	W. V. N.	1	23	45·0	23	52·2	23	32·4	23	48·4	23 44·5		
„ 25	12	46	13	16	W. V. N.	2	23	41·5	23	54·2	23	38·2	23	44·0	23 44·5		
„ 29	12	30	14	10	W. V. N.	1	23	42·2	23	55·5	23	30·7	23	44·5	23 43·5		
„ 31	14	5	16	10	G. S. J.	2	23	39·1	23	46·2	23	38·7	23	43·4	23 41·8		

1911. Date.	Alibag Civil Time (0 to 24 hours). At commencement.		At conclusion.		Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.		A. Face of Circle. West.		B. Face of Circle. East.		B. Face of Circle. West.		Mean Dip.	Monthly Mean for each Needle.	Monthly Mean.
	H.	m.	H.	m.			°	′	°	′	°	′	°	′	° ′	° ′	° ′
April 1	11	56	13	27	G. S. J.	1	23	40·7	23	49·8	23	29·6	23	38·9	23 39·7		
,, 1	12	18	13	3	G. S. J.	2	23	38·4	23	47·0	23	36·1	23	41·4	23 40·7		
,, 4	11	34	13	18	G. S. J.	1	23	39·4	23	55·0	23	28·4	23	45·4	23 42·0		
,, 7	13	40	15	36	G. S. J.	2	23	43·2	23	48·2	23	37·9	23	43·4	23 43·2		
,, 8	11	57	13	25	G. S. J.	1	23	46·2	23	54·2	23	33·9	23	40·4	23 43·7		
,, 8	12	17	13	7	G. S. J.	2	23	41·6	23	54·7	23	41·2	23	44·4	23 45·5	No. 1	
,, 11	10	50	13	21	G. S. J.	1	23	47·1	23	52·9	23	30·9	23	47·0	23 44·5	23 42·8	
,, 11	12	13	13	2	G. S. J.	2	23	45·7	23	48·5	23	40·9	23	44·3	23 44·8		
,, 14	13	48	15	44	G. S. J.	2	23	42·5	23	51·2	23	40·7	23	47·1	23 45·4		23 43·3
,, 15	11	40	13	37	G. S. J.	1	23	43·4	23	55·1	23	32·9	23	44·5	23 44·0		
,, 18	11	45	13	36	G. S. J.	1	23	42·5	23	53·9	23	32·7	23	47·5	23 44·1	No. 2	
,, 21	13	35	15	38	G. S. J.	2	23	40·3	23	49·7	23	40·5	23	45·5	23 44·0	23 43·8	
,, 22	12	12	13	48	G. S. J.	1	23	45·8	23	55·1	23	33·9	23	42·2	23 44·2		
,, 22	12	35	13	25	G. S. J.	2	23	42·4	23	52·1	23	39·1	23	45·4	23 44·7		
,, 25	11	48	13	38	G. S. J.	1	23	42·1	23	52·7	23	30·6	23	43·1	23 42·1		
,, 28	13	52	15	51	G. S. J.	2	23	41·9	23	50·9	23	42·7	23	45·0	23 45·1		
,, 29	11	45	13	18	G. S. J.	1	23	40·9	23	48·4	23	37·8	23	36·1	23 40·8		
,, 29	12	8	12	56	G. S. J.	2	23	38·7	23	48·2	23	37·8	23	39·2	23 41·0		
May 2	11	50	13	48	G. S. J.	1	23	46·6	23	52·0	23	34·8	23	42·1	23 43·9		
,, 5	13	40	15	34	G. S. J.	2	23	39·7	23	49·5	23	41·5	23	41·7	23 43·1		
,, 6	11	58	13	40	G. S. J.	1	23	47·6	23	47·0	23	37·4	23	40·3	23 43·1		
,, 6	12	22	13	16	G. S. J.	2	23	39·6	23	46·2	23	35·9	23	39·6	23 40·3		
,, 9	11	56	13	51	G. S. J.	1	23	41·3	23	48·9	23	34·4	23	45·0	23 42·4		
,, 12	13	34	15	25	G. S. J.	2	23	43·3	23	50·9	23	42·2	23	41·9	23 44·6		
,, 13	13	56	15	29	G. S. J.	1	23	45·2	23	56·9	23	30·6	23	40·5	23 43·3	No. 1.	
,, 13	14	17	15	7	G. S. J.	2	23	43·6	23	53·4	23	36·4	23	42·2	23 43·9	23 42·8	
,, 16	11	40	13	34	G. S. J.	1	23	45·2	23	52·2	23	32·8	23	44·9	23 43·8		
,, 19	12	12	14	20	G. S. J.	2	23	36·2	23	51·9	23	42·9	23	45·6	23 44·1		
,, 20	12	8	14	40	S. B. B.	1	23	44·2	24	0·2	23	35·4	23	43·9	23 45·9		23 43·5
,, 22	11	2	13	1	G. S. J.	1	23	41·7	24	0·0	23	29·4	23	40·4	23 42·9		
,, 23	13	57	15	53	G. S. J.	2	23	42·6	23	49·6	23	40·9	23	43·6	23 44·2		
,, 24	10	50	12	45	S. B. B.	1	23	43·0	23	59·9	23	28·2	23	44·2	23 43·8	No. 2	
,, 25	13	52	16	25	S. B. B.	2	23	43·0	23	49·2	23	39·7	23	46·2	23 44·5	23 44·3	
,, 26	11	8	13	4	G. S. J.	1	23	38·8	24	1·3	23	21·1	23	39·5	23 40·2		
,, 27	13	55	15	48	G. S. J.	2	23	42·4	23	49·9	23	46·8	23	47·6	23 46·7		
,, 29	10	30	11	23	S. B. B.	1	23	40·4	24	1·5	23	24·0	23	36·4	23 40·6		
,, 30	13	56	15	59	S. B. B.	2	23	39·7	23	58·1	23	46·4	23	43·9	23 47·0		
,, 31	11	15	13	3	G. S. J.	1	23	42·3	23	56·6	23	25·7	23	40·5	23 41·3		
June 1	13	50	15	54	G. S. J.	2	23	43·9	23	50·4	23	41·5	23	44·5	23 45·1		
,, 2	10	31	11	23	S. B. B.	1	23	46·5	23	57·0	23	31·9	23	39·0	23 43·6		
,, 5	11	8	13	20	G. S. J.	1	23	45·9	23	53·3	23	30·5	23	44·9	23 43·6		
,, 6	13	54	15	51	G. S. J.	2	23	41·9	23	55·7	23	38·7	23	46·7	23 45·7		
,, 7	11	5	13	30	S. B. B.	1	23	44·1	23	55·8	23	29·7	23	42·2	23 42·9		
,, 8	13	53	16	5	S. B. B.	2	23	44·1	23	55·3	23	35·6	23	48·9	23 46·0		
,, 9	11	21	13	30	G. S. J.	1	23	40·7	23	54·3	23	33·4	23	43·7	23 43·0	No. 1.	
,, 10	13	49	15	32	G. S. J.	2	23	42·9	23	51·6	23	41·1	23	45·2	23 45·2	23 42·9	
,, 12	10	24	15	2	S. B. B.	1	23	40·1	23	55·4	23	33·2	23	45·5	23 43·5		
,, 13	13	30	15	58	S. B. B.	2	23	46·1	23	50·8	23	40·2	23	44·4	23 45·4		
,, 14	10	48	13	4	G. S. J.	1	23	47·9	23	46·9	23	29·4	23	35·8	23 40·0		
,, 15	13	36	15	37	G. S. J.	2	23	45·6	23	53·6	23	38·5	23	46·4	23 46·0		23 44·4
,, 16	10	47	12	50	S. B. B.	1	23	45·2	23	53·5	23	33·7	23	38·8	23 42·8		
,, 17	13	30	15	30	S. B. B.	2	23	46·6	23	55·3	23	39·7	23	44·1	23 46·4		
,, 19	11	14	13	17	G. S. J.	1	23	42·1	23	55·0	23	32·6	23	41·0	23 42·7		
,, 20	13	34	15	33	G. S. J.	2	23	43·1	23	54·7	23	41·6	23	45·5	23 46·2	No. 2	
,, 21	10	30	12	40	S. B. B.	1	23	41·9	23	56·4	23	35·6	23	38·6	23 43·1	23 46·1	
,, 23	12	15	13	4	G. S. J.	1	23	48·2	23	51·0	23	35·2	23	41·1	23 43·9		
,, 24	15	13	15	55	G. S. J.	2	23	45·8	23	52·4	23	43·6	23	42·3	23 46·0		
,, 26	10	25	11	16	S. B. B.	1	23	44·8	23	54·4	23	32·6	23	40·8	23 43·1		
,, 27	14	55	15	37	S. B. B.	2	23	51·4	23	55·7	23	43·2	23	42·1	23 48·1		
,, 28	12	16	13	5	G. S. J.	1	23	46·7	23	49·4	23	32·1	23	41·4	23 42·4		
,, 29	15	11	15	55	G. S. J.	2	23	43·0	23	54·9	23	43·6	23	48·2	23 47·4		
,, 30	10	32	11	19	S. B. B.	1	23	48·2	23	51·9	23	29·6	23	42·9	23 43·1		

1911. Date.	Alibag Civil Time (0 to 24 hours). At commencement.		At conclusion.		Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.		A. West.		B. Face of Circle. East.		B. West.		Mean Dip.		Monthly Mean for each Needle.	Monthly Mean.
	H.	m.	H.	m.			°	′	°	′	°	′	°	′	°	′	° ′	° ′
JULY 1	14	55	15	42	S. B. B.	2	23	43·5	23	59·5	23	41·5	23	45·9	23	47·6		
,, 3	12	22	13	8	G. S J.	1	23	50·5	23	56·4	23	34·0	23	40·2	23	45·3		
,, 4	14	57	15	40	G. S. J.	2	23	45·6	23	57·6	23	40·8	23	45·4	23	47·3		
,, 5	11	52	13	0	S. B. B.	1	23	51·2	23	57·2	23	38·6	23	42·7	23	47·4		
,, 6	15	5	15	48	S. B. B.	2	23	45·1	23	57·6	23	41·0	23	47·7	23	47·8		
,, 7	12	12	12	58	G. S. J.	1	23	49·1	23	56·1	23	32·1	23	40·6	23	44·5		
,, 8	15	18	16	0	G. S. J.	2	23	42·7	23	55·6	23	42·4	23	47·6	23	47·1	No. 1	
,, 10	12	25	13	7	S. B. B.	1	23	45·2	23	58·0	23	29·8	23	46·0	23	44·7	23 44·8	
,, 11	15	31	16	12	G. S. J.	2	23	44·2	23	56·1	23	42·6	23	49·1	23	48·0		
,, 12	12	38	13	22	G. S. J.	1	23	47·2	23	56·6	23	32·2	23	41·7	23	44·4		
,, 13	14	55	15	46	G. S. J.	2	23	46·1	23	57·9	23	42·2	23	47·3	23	48·4		
,, 14	12	12	12	57	S. B. B.	1	23	47·9	23	55·2	23	30·6	23	40·9	23	43·6		
,, 15	14	36	15	20	S. B. B.	2	23	50·9	23	54·4	23	42·3	23	46·3	23	48·5		23 46·3
,, 17	12	30	13	16	G. S. J.	1	23	47·2	23	52·7	23	29·7	23	37·7	23	41·8		
,, 18	15	6	15	51	G. S. J.	2	23	46·5	23	56·2	23	43·7	23	47·7	23	48·5		
,, 19	11	50	12	50	S. B. B.	1	23	51·1	23	55·6	23	36·7	23	46·2	23	47·4		
,, 20	14	37	15	22	S. B. B.	2	23	41·7	23	58·0	23	44·1	23	51·4	23	48·8		
,, 21	12	23	13	9	G. S. J.	1	23	50·9	23	55·7	23	34·6	23	40·1	23	45·3		
,, 22	14	57	15	39	G. S. J.	2	23	41·9	23	58·5	23	41·4	23	49·5	23	47·8	No. 2	
,, 24	10	27	11	12	S. B. B.	1	23	54·0	23	52·7	23	31·9	23	42·6	23	45·3	23 47·8	
,, 25	14	35	15	17	S. B. B.	2	23	44·7	24	2·7	23	36·7	23	48·2	23	48·1		
,, 26	12	21	13	8	G. S. J.	1	23	45·4	23	49·7	23	36·7	23	43·4	23	43·8		
,, 27	14	54	15	38	G. S. J.	2	23	46·1	23	59·2	23	38·3	23	46·5	23	47·5		
,, 28	10	14	10	58	S. B. B.	1	23	44·1	23	55·2	23	35·1	23	42·9	23	44·3		
,, 29	14	25	15	10	S. B. B.	2	23	42·8	24	2·6	23	38·5	23	42·2	23	46·5		
,, 31	12	15	13	0	G. S. J.	1	23	48·9	23	55·1	23	32·4	23	40·9	23	44·3		
AUG. 1	15	14	15	57	G. S. J.	2	23	42·7	23	54·1	23	43·8	23	46·7	23	46·8		
,, 2	12	12	13	5	S. B. B.	1	23	57·3	24	0·9	23	33·0	23	44·8	23	49·0		
,, 3	14	31	15	14	S. B. B.	2	23	41·1	23	54·6	23	45·4	23	48·6	23	47·4		
,, 4	12	26	13	14	G. S. J.	1	23	48·6	23	52·3	23	37·6	23	43·8	23	45·6		
,, 5	14	47	15	30	G. S. J.	2	23	42·7	23	58·8	23	41·1	23	49·2	23	47·9	No. 1	
,, 7	12	7	12	52	S. B. B.	1	23	43·5	23	58·5	23	36·4	23	43·9	23	45·6	23 45·3	
,, 8	14	37	15	22	S. B. B.	2	23	45·0	23	56·0	23	44·9	23	41·9	23	46·9		
,, 10	15	56	16	34	G. S. J.	2	23	47·0	23	55·5	23	39·0	23	41·6	23	45·8		
,, 11	12	18	12	58	S. B. B.	1	23	47·9	23	48·7	23	40·0	23	44·2	23	45·2		
,, 12	14	35	15	15	S. B. B.	2	23	53·9	23	47·9	23	46·5	23	49·1	23	49·3		
,, 14	12	28	13	10	G. S. J	1	23	43·2	23	54·3	23	31·1	23	42·2	23	42·7		
,, 15	14	46	15	30	G. S. J.	2	23	42·7	23	55·2	23	42·7	23	50·1	23	47·7		23 46·7
,, 16	12	5	12	43	S. B. B.	1	23	50·6	23	56·4	23	37·4	23	40·2	23	46·1		
,, 18	12	26	13	11	G. S. J.	1	23	47·3	23	52·5	23	32·9	23	44·3	23	44·2		
,, 19	15	0	15	49	G. S. J.	2	23	48·2	23	58·6	23	43·5	23	48·7	23	49·7		
,, 21	11	10	11	50	S. B. B.	1	23	47·4	23	51·1	23	35·8	23	44·1	23	44·6		
,, 22	14	50	15	34	S. B. B.	2	23	48·4	23	56·2	23	47·8	23	42·9	23	48·8		
,, 23	12	54	13	34	G. S. J.	1	23	44·7	23	52·9	23	34·9	23	49·6	23	45·5	No. 2	
,, 24	14	56	15	38	G. S. J.	2	23	43·1	23	59·1	23	43·2	23	50·6	23	49·0	23 47·9	
,, 25	12	20	13	0	S. B. B.	1	23	48·6	23	53·3	23	34·7	23	46·8	23	45·8		
,, 26	14	42	15	22	S. B. B.	2	23	51·5	24	3·5	23	37·3	23	42·6	23	48·7		
,, 30	11	20	12	2	S. B. B.	1	23	49·0	23	50·7	23	37·7	23	40·6	23	44·5		
,, 31	15	18	15	59	S. B. B.	2	23	43·8	23	53·7	23	42·9	23	45·9	23	46·6		
SEPT. 1	12	9	12	55	G. S. J.	1	23	43·2	23	54·2	23	35·4	23	46·4	23	44·8		
,, 2	15	11	15	52	G. S. J.	2	23	44·2	23	54·2	23	45·1	23	46·9	23	47·6		
,, 4	11	33	12	28	S. B. B.	1	23	44·1	23	53·6	23	36·9	23	44·4	23	44·7		
,, 5	14	32	15	14	S. B. B.	2	23	45·2	23	52·2	23	42·9	23	50·4	23	47·7		
,, 6	12	30	13	20	G. S. J.	1	23	40·9	23	49·1	23	34·2	23	45·7	23	42·5	*No. 1	
,, 7	15	0	15	46	G. S. J.	2	23	48·8	23	57·7	23	41·5	23	46·7	23	48·7	23 44·0	
,, 8	11	36	12	32	S. B. B.	1	23	45·2	23	56·2	23	35·6	23	42·0	23	44·7		
,, 9	15	20	15	59	S. B. B.	2	23	42·2	23	56·1	23	43·6	23	44·5	23	46·6		
,, 11	12	35	13	20	G. S. J.	1	23	46·1	23	55·2	23	33·3	23	42·4	23	44·2		
,, 14	14	47	15	30	G. S. J.	2	23	42·4	23	57·2	23	43·8	23	48·6	23	48·0		
,, 15	12	40	13	25	G. S. J.	1	23	40·6	23	56·1	23	33·7	23	42·7	23	43·3		
,, 16	14	43	15	29	G. S. J.	2	23	44·0	23	58·7	23	42·7	23	48·6	23	48·5		23 47·1
,, 19	17	9	17	46	S. B. B.	2	23	46·4	23	58·9	23	43·7	23	47·4	23	49·1		
,, 20	14	0	14	36	G. S. J.	2	23	42·8	23	58·9	23	44·5	23	51·4	23	49·4		
,, 21	15	27	16	14	G. S. J.	2	23	45·4	24	0·7	23	42·7	23	51·6	23	50·1		
,, 22	13	0	13	40	S. B. B.	2	23	45·1	23	58·2	23	45·9	23	47·2	23	49·1		
,, 23	14	33	15	13	S. B. B.	2	23	47·6	23	57·7	23	43·4	23	49·6	23	49·6	No. 2	
,, 25	12	39	13	25	G. S. J.	2	23	37·6	23	55·2	23	39·2	23	48·2	23	45·0	23 48·1	
,, 26	14	54	15	36	G. S. J.	2	23	42·4	23	59·1	23	41·9	23	50·1	23	48·4		
,, 27	12	6	12	47	S. B. B.	2	23	46·6	23	55·7	23	38·2	23	49·2	23	47·4		
,, 28	14	46	15	30	S. B. B.	2	23	50·2	24	2·4	23	39·1	23	44·6	23	49·1		
,, 29	11	12	11	58	S. B. B.	2	23	40·1	23	45·6	23	48·6	23	49·0	23	45·8		
,, 30	15	7	15	51	G. S. J.	2	23	45·2	23	55·2	23	43·5	23	47·7	23	47·9		

* Needle marked 1 was rejected for observations from 16th September.

1911. Date.	Alibag Civil Time (0 to 24 hours). At commencement.		At conclusion.		Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.		A. West.		B. Face of Circle. East.		B. West.		Mean Dip.		Monthly Mean for each Needle.		*Monthly Mean.	
	H.	m.	H.	m.			°	′	°	′	°	′	°	′	°	′	°	′	°	′
Oct. 3	14	37	15	19	S. B. B.	2	23	49·7	23	54·6	23	43·2	23	48·9	23	49·1				
,, 4	12	14	12	56	G. S. J.	2	23	42·1	23	56·4	23	43·1	23	46·6	23	47·0				
,, 5	14	40	15	25	G. S. J.	2	23	45·2	23	55·5	23	42·9	23	47·2	23	47·7				
,, 6	11	30	12	14	S. B. B.	2	23	47·5	23	55·5	23	42·5	23	44·2	23	47·4				
,, 7	14	48	15	25	S. B. B.	2	23	49·9	23	56·7	23	41·7	23	44·5	23	48·2				
,, 9	13	3	13	54	G. S. J.	2	23	42·9	23	57·1	23	41·6	23	46·9	23	47·1				
,, 10	14	42	15	23	G. S. J.	2	23	43·2	23	57·1	23	42·7	23	49·4	23	48·1				
,, 11	12	12	12	52	S. B. B.	2	23	51·5	23	57·6	23	35·0	23	45·5	23	47·4				
,, 12	14	31	15	12	S. B. B.	2	23	49·1	23	56·8	23	40·9	23	47·4	23	48·5				
,, 13	12	55	13	34	G. S. J.	2	23	46·4	24	2·0	23	36·5	23	44·7	23	47·4				
,, 14	14	40	15	25	G. S. J.	2	23	43·8	23	59·5	23	38·2	23	50·4	23	48·0			23	47·8
,, 16	11	12	11	53	S. B. B.	2	23	48·5	23	57·5	23	39·7	23	47·2	23	48·2				
,, 17	14	55	15	36	S. B. B.	2	23	47·9	23	56·5	23	41·0	23	46·2	23	47·9				
,, 18	12	7	12	47	G. S. J.	2	23	43·5	23	59·9	23	42·5	23	49·1	23	48·7				
,, 19	14	45	15	26	G. S. J.	2	23	44·3	23	58·7	23	42·2	23	49·3	23	48·6				
,, 20	12	30	13	12	S. B. B.	2	23	46·7	23	58·5	23	41·0	23	46·5	23	48·2				
,, 25	11	29	12	11	S. B. B.	2	23	46·7	23	59·7	23	38·9	23	45·0	23	47·6				
,, 26	14	22	15	6	S. B. B.	2	23	46·7	23	59·7	23	41·1	23	45·7	23	48·3				
,, 27	12	0	12	41	G. S. J.	2	23	42·7	23	59·1	23	37·5	23	46·5	23	46·4				
,, 28	15	14	15	53	G. S. J.	2	23	44·4	23	58·4	23	39·2	23	46·8	23	47·2				
,, 30	12	16	13	0	S. B. B.	2	23	48·5	24	2·4	23	37·5	23	42·9	23	47·8				
,, 31	14	38	15	28	S. B. B.	2	23	44·7	23	58·5	23	41·9	23	45·7	23	47·7				
Nov. 1	12	45	13	32	G. S. J.	2	23	44·2	24	0·4	23	39·4	23	46·9	23	47·7				
,, 2	15	26	16	4	G. S. J.	2	23	42·8	23	56·9	23	41·2	23	45·7	23	46·6				
,, 3	12	29	13	26	S. B. B.	2	23	50·2	24	3·0	23	43·6	23	42·2	23	49·7				
,, 4	14	55	15	49	S. B. B.	2	23	52·1	24	5·5	23	37·5	23	46·0	23	50·3				
,, 6	12	51	13	30	G. S. J.	2	23	47·6	23	59·2	23	40·6	23	45·4	23	48·2				
,, 7	14	55	15	37	G. S. J.	2	23	42·0	24	0·8	23	39·1	23	51·6	23	48·4				
,, 8	13	2	14	2	A.	2	23	51·2	24	0·5	23	41·1	23	47·5	23	50·1				
,, 9	14	54	15	40	A.	2	23	49·2	24	5·2	23	40·3	23	48·4	23	50·8				
,, 10	12	18	12	58	G. S. J.	2	23	46·2	24	3·9	23	37·2	23	46·6	23	48·5				
,, 11	15	21	16	0	G. S. J.	2	23	46·9	24	3·9	23	37·6	23	51·0	23	49·8				
,, 13	12	7	12	48	A.	2	23	43·7	24	3·4	23	38·7	23	48·4	23	48·5				
,, 14	15	2	15	45	A.	2	23	49·9	23	56·4	23	40·4	23	56·7	23	50·8				
,, 15	12	7	12	57	G. S. J.	2	23	46·8	24	0·1	23	43·9	24	0·7	23	52·9			23	49·1
,, 16	14	39	15	26	G. S. J.	2	23	48·7	24	0·1	23	42·9	23	44·7	23	49·1				
,, 17	12	37	13	26	A.	2	23	49·6	24	1·6	23	43·9	23	43·2	23	49·6				
,, 18	14	30	15	8	A.	2	23	43·2	23	57·2	23	44·9	23	47·0	23	48·1				
,, 20	12	45	13	24	G. S. J.	2	23	47·4	24	0·7	23	41·9	23	44·7	23	48·7				
,, 21	14	41	15	21	G. S. J.	2	23	49·1	24	2·8	23	41·7	23	46·7	23	50·1				
,, 22	12	1	12	52	A.	2	23	48·6	23	59·7	23	46·0	23	46·2	23	50·1				
,, 23	14	25	15	6	A.	2	23	45·0	24	0·4	23	41·4	23	47·9	23	48·7				
,, 24	11	30	12	12	G. S. J.	2	23	43·4	23	54·9	23	39·2	23	51·4	23	47·2				
,, 25	14	42	15	25	G. S. J.	2	23	43·1	24	6·0	23	40·2	23	51·8	23	50·3				
,, 27	12	10	12	58	A.	2	23	43·5	24	3·2	23	38·0	23	44·9	23	47·4				
,, 28	14	35	15	18	A.	2	23	43·2	24	3·2	23	43·1	23	47·7	23	49·3				
,, 29	12	40	13	22	G. S. J.	2	23	43·1	24	1·1	23	40·3	23	47·7	23	48·0				
,, 30	14	44	15	28	G. S. J.	2	23	45·9	23	59·7	23	42·5	23	46·7	23	48·7				
Dec. 1	12	31	13	21	A.	2	23	48·2	23	58·9	23	47·0	23	49·2	23	50·8				
,, 2	14	50	15	31	A.	2	23	51·1	24	2·4	23	40·9	23	51·2	23	51·4				
,, 4	11	36	12	17	G. S. J.	2	23	44·6	24	1·7	23	44·2	23	44·9	23	48·8				
,, 5	14	46	15	26	G. S. J.	2	23	53·7	23	56·3	23	45·2	23	46·5	23	50·4				
,, 6	12	16	12	58	A.	2	23	48·2	23	55·5	23	51·1	23	43·6	23	49·6				
,, 8	12	4	12	47	G. S. J.	2	23	47·2	23	56·5	23	45·5	23	53·7	23	50·7				
,, 9	14	40	15	20	G. S. J.	2	23	46·2	24	1·2	23	46·2	23	48·2	23	50·4				
,, 11	12	12	12	56	A.	2	23	49·6	24	2·6	23	50·6	23	52·0	23	53·7				
,, 13	11	49	12	31	G. S. J.	2	23	46·8	23	58·9	23	40·2	23	45·4	23	47·8				
,, 14	14	44	15	29	G. S. J.	2	23	46·6	24	6·2	23	38·6	23	44·8	23	49·0				
,, 15	12	34	13	18	A.	2	23	47·4	23	56·0	23	49·5	23	47·4	23	50·1				
,, 16	14	55	15	40	A.	2	23	52·2	24	0·5	23	46·5	23	43·1	23	50·6			23	50·1
,, 18	12	27	13	9	G. S. J.	2	23	48·1	23	56·7	23	46·1	23	44·2	23	48·8				
,, 19	14	44	15	25	G. S. J.	2	23	43·0	24	4·5	23	38·9	23	54·1	23	50·1				
,, 20	11	27	12	10	A.	2	23	41·7	24	1·7	23	50·2	23	49·6	23	50·8				
,, 21	14	20	15	1	A.	2	23	43·4	24	2·0	23	47·4	23	47·9	23	50·2				
,, 22	12	5	12	48	G. S. J.	2	23	46·5	23	53·8	23	46·4	23	48·0	23	48·7				
,, 23	14	38	15	20	G. S. J.	2	23	45·0	23	54·9	23	48·4	23	44·9	23	48·3				
,, 26	14	10	14	52	A.	2	23	49·0	23	55·1	23	47·1	23	48·7	23	50·0				
,, 27	13	0	13	38	G. S. J.	2	23	47·4	23	56·9	23	49·6	23	50·2	23	51·0				
,, 28	14	40	15	24	G. S. J.	2	23	47·5	23	54·1	23	49·6	23	48·9	23	50·0				
,, 29	11	45	12	27	A.	2	23	46·9	23	58·0	23	48·0	23	50·4	23	50·8				
,, 30	14	25	15	6	A.	2	23	50·6	24	0·9	23	46·2	23	47·1	23	51·2				

The mean * observed Dip for the year 1911 = 23 45·5

*The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

Absolute Magnetical Observations, Alibag—Table Ia.

Observations of Vibration and Deflection, taken with Magnetometer No. 7 (T. Cooke and Sons) for the determination of Absolute Horizontal Force.

1912.

1912. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection of Magnet marked 7. Distance 22·5 cms.	Angle of Deflection of Magnet marked 7. Distance 30·0 cms.	Angle of Deflection of Magnet marked 7. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	Values of H. From Deflection at distance. 30·0 cms. ($H_{30\cdot0}$).	Values of H. Difference. $H_{22\cdot5}-H_{30\cdot0}$	Values of H. Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
JAN. 3	14 28	2·7073	1·37	27·3	−0·2	6·747	86·25	26 37 1	10 49 51	27·5	6·718	86·25	G. S. J.	938·14	0·36879	0·36872	+·00007	0·36875	
„ 5	14 29	2·7062	1·34	26·9	−0·1	6·692	86·00	26 38 5	10 49 54	27·1	6·602	86·00	A.	938·53	·36884	·36888	−·00004	·36886	
„ 8	14 33	2·7065	1·38	26·4	0·0	6·645	85·60	26 38 15	10 50 17	26·6	6·578	85·60	G. S. J.	938·34	·36878	·36872	+·00006	·36875	
„ 12	15 2	2·7068	1·56	26·1	+0·1	6·361	85·10	26 39 16	10 50 35	26·1	6·320	85·10	G. S. J.	938·27	·36864	·36860	+·00004	·36862	
„ 15	14 26	2·7062	1·57	25·7	+0·2	6·480	84·55	26 39 39	10 50 40	26·1	6·427	84·55	A.	938·49	·36865	·36863	+·00002	·36864	
„ 17	14 33	2·7058	1·55	26·0	+0·2	7·182	84·40	26 38 9	10 50 7	26·4	6·937	84·40	G. S. J.	938·36	·36885	·36883	+·00002	·36884	
„ 19	14 57	2·7063	1·50	27·5	+0·3	6·938	84·30	26 37 52	10 50 2	27·5	6·760	84·30	A.	938·69	·36885	·36882	+·00003	·36883	0·368778
„ 22	14 30	2·7070	1·56	27·7	+0·3	7·001	84·27	26 37 5	10 49 42	27·6	6·946	84·27	G. S. J.	938·32	·36885	·36883	+·00002	·36884	
„ 24	14 28	2·7070	1·51	27·2	+0·3	7·135	84·27	26 37 10	10 49 41	27·4	7·033	84·27	A.	938·17	·36882	·36881	+·00001	·36881	
„ 26	14 49	2·7078	1·54	28·8	+0·2	6·680	84·30	26 36 14	10 49 25	28·9	6·657	84·30	G. S. J.	938·34	·36881	·36877	+·00004	·36879	
„ 29	14 30	2·7075	1·53	29·0	0·0	Not available.	84·42	26 36 20	10 49 35	29·0	Not available.	84·42	A.	938·60	·36884	·36878	+·00006	·36881	
„ 31	14 32	2·7067	1·55	27·0	−0·1	6·770	84·50	26 37 10	10 49 47	27·5	6·782	84·50	G. S. J.	938·27	·36882	·36879	+·00003	·36880	
FEB. 2	14 36	2·7063	1·60	26·5	0·0	7·021	84·20	26 38 25	10 50 5	26·6	6·990	84·20	A.	938·34	·36878	·36880	−·00002	·36879	
„ 5	14 51	2·7062	1·55	26·3	+0·2	6·972	84·15	26 37 52	10 50 0	26·7	6·897	84·15	G. S. J.	938·27	·36883	·36882	+·00001	·36882	
„ 7	14 46	2·7058	1·53	26·6	+0·3	7·122	84·05	26 37 41	10 50 7	26·7	7·063	84·05	A.	938·49	·36893	·36886	+·00007	·36889	
„ 9	14 28	2·7067	1·56	27·1	+0·4	6·993	84·10	26 37 12	10 49 44	27·3	6·985	84·10	G. S. J.	938·23	·36885	·36883	+·00002	·36884	
„ 12	14 38	2·7069	1·53	27·7	+0·2	6·725	84·00	26 37 17	10 50 0	27·8	6·720	84·00	A.	938·53	·36882	·36874	+·00008	·36878	
„ 14	14 56	2·7063	1·53	26·7	0·0	6·747	83·90	26 38 29	10 50 10	26·8	6·692	83·90	G. S. J.	938·49	·36877	·36877	·00000	·36877	·368804
„ 19	14 22	2·7060	1·56	27·2	−0·3	7·103	84·07	26 36 35	10 49 33	27·5	7·022	84·07	G. S. J.	938·38	·36900	·36897	+·00003	·36898	
„ 21	14 31	2·7077	1·54	28·7	−0·1	6·828	84·12	26 36 5	10 49 25	28·9	6·766	84·12	A.	938·36	·36882	·36878	+·00004	·36880	
„ 23	14 31	2·7079	1·55	29·0	0·0	6·867	84·10	26 36 2	10 49 15	29·1	6·712	84·10	G. S. J.	938·32	·36882	·36882	·00000	·36882	
„ 26	14 48	2·7072	1·49	27·1	+0·2	6·175	84·20	26 39 17	10 50 24	27·3	5·947	84·20	A.	938·58	·36856	·36858	−·00002	·36857	
„ 28	14 32	2·7067	1·54	27·0	+0·3	6·782	84·22	26 37 56	10 50 0	27·0	6·711	84·22	G. S. J.	938·34	·36879	·36878	+·00001	·36878	

MAR.	1	14	31	2·7070	1·52	27·1	+0·4	6·560	84·30	26	37	57	10	50	1	27·3	6·518	84·30	A.	938·34	0·36872	0·36871	+·00001	0·36871	
,,	4	14	54	2·7071	1·53	27·0	+0·4	6·710	84·20	26	38	26	10	50	12	26·8	6·593	84·20	G. S. J.	938·30	·36871	·36869	+·00002	·36870	
,,	6	14	36	2·7057	1·53	27·0	+0·4	7·018	84·10	26	37	51	10	49	52	27·1	6·920	84·10	A.	938·64	·36893	·36894	−·00001	·36893	
,,	8	14	38	2·7070	1·51	27·0	+0·3	6·617	84·07	26	39	9	10	50	26	27·2	6·110	84·07	G. S. J.	938·62	·36860	·36860	·00000	·36860	
,,	11	15	27	2·7077	1·55	28·4	+0·1	6·557	84·37	26	37	6	10	49	35	28·5	6·527	84·37	A.	938·40	·36873	·36875	−·00002	·36874	
,,	13	14	41	2·7070	1·53	28·4	+0·1	6·757	84·42	26	36	42	10	49	31	28·7	6·590	84·42	G. S. J.	938·60	·36885	·36884	+·00001	·36884	0·368828
,,	19	13	55	2·7066	1·53	28·2	0·0	7·245	85·05	26	35	11	10	49	1	28·3	7·092	85·05	G. S. J.	938·30	·36909	·36906	+·00003	·36907	
,,	21	14	30	2·7074	1·52	28·3	0·0	6·630	85·17	26	36	37	10	49	26	28·3	6·560	85·17	A.	938·32	·36883	·36884	−·00001	·36883	
,,	22	14	39	2·7074	1·53	27·6	−0·1	6·367	85·25	26	37	37	10	49	51	27·9	6·183	85·25	G. S. J.	938·34	·36871	·36871	·00000	·36871	
,,	25	14	29	2·7064	1·52	28·0	−0·1	6·787	85·60	26	36	24	10	49	27	28·0	6·682	85·60	A.	938·49	·36899	·36898	+·00001	·36898	
,,	29	14	26	2·7069	1·53	28·7	0·0	6·810	85·70	26	35	22	10	49	9	28·8	6·765	85·70	A.	938·40	·36903	·36898	+·00005	·36900	
APRIL	1	14	39	2·7082	1·54	29·3	0·0	6·627	86·02	26	35	55	10	49	12	29·2	6·483	86·02	G. S. J.	938·27	·36881	·36880	+·00001	·36880	
,,	3	14	32	2·7081	1·55	28·9	−0·4	6·417	86·25	26	36	12	10	49	23	28·9	6·302	86·25	A.	938·27	·36878	·36876	+·00002	·36877	
,,	8	14	29	2·7095	1·53	30·8	−0·9	6·195	86·65	26	34	47	10	48	52	31·0	6·127	86·65	A.	938·30	·36871	·36868	+·00003	·36869	
,,	10	14	36	2·7101	1·53	30·4	−1·1	5·826	86·87	26	35	50	10	49	22	30·4	5·672	86·87	G. S. J.	938·04	·36853	·36857	−·00004	·36855	
,,	12	14	33	2·7085	1·53	29·8	−1·3	6·467	87·27	26	35	14	10	48	58	29·7	6·347	87·27	A.	938·21	·36882	·36882	·00000	·36882	
,,	16	14	1	2·7107	1·52	30·4	−1·2	5·440	87·75	26	35	47	10	49	8	30·5	5·645	87·75	G. S. J.	937·91	·36845	·36845	·00000	·36845	
,,	18	14	30	2·7090	1·52	30·5	−1·1	5·930	87·90	26	35	28	10	48	58	31·0	5·755	87·90	A.	938·53	·36868	·36869	−·00001	·36868	
,,	19	14	33	2·7093	1·53	30·6	−1·0	6·125	88·07	26	34	39	10	48	2	30·9	6·052	88·07	G. S. J.	938·21	·36874	·36874	·00000	·36874	·368728
,,	22	14	33	2·7097	1·53	31·3	−1·0	6·056	88·45	26	33	46	10	48	24	31·6	6·010	88·45	A.	938·17	·36877	·36877	·00000	·36877	
,,	24	14	39	2·7096	1·55	31·4	−0·9	6·256	88·70	26	33	30	10	48	16	31·6	6·128	88·70	G. S. J.	938·14	·36883	·36883	·00000	·36883	
,,	26	14	31	2·7093	1·53	30·2	−1·0	6·126	88·77	26	34	37	10	48	40	30·4	6·140	88·77	A.	937·97	·36875	·36876	−·00001	·36875	
,,	29	14	49	2·7090	1·58	30·8	−1·1	6·352	89·00	26	33	35	10	48	25	30·9	6·261	89·00	G. S. J.	938·10	·36891	·36888	+·00003	·36889	
MAY	1	15	22	2·7081	1·54	30·0	−1·1	6·048	89·12	26	34	53	10	48	52	30·4	6·018	89·12	A.	938·47	·36888	·36885	+·00003	·36886	
,,	3	14	9	2·7089	1·55	30·1	−1·0	5·998	89·30	26	35	0	10	48	50	30·3	5·943	89·30	G. S. J.	938·19	·36877	·36877	·00000	·36877	
,,	6	15	27	2·7099	1·54	30·8	−1·2	5·664	89·62	26	35	21	10	49	0	30·7	5·455	89·62	A.	938·23	·36862	·36861	+·00001	·36861	
,,	10	15	43	2·7095	1·53	31·0	−1·2	5·912	89·90	26	34	24	10	48	37	30·5	5·838	89·90	A.	938·06	·36881	·36881	·00000	·36881	
,,	14	14	12	2·7104	1·55	30·9	−1·0	5·470	90·40	26	35	1	10	48	47	30·8	5·450	90·40	G. S. J.	937·95	·36849	·36850	−·00001	·36849	
,,	15	17	9	2·7104	1·56	31·5	−1·2	5·337	90·45	26	35	15	10	49	0	31·1	5·335	90·45	A.	938·27	·36859	·36857	+·00002	·36858	·368780
,,	22	13	0	2·7089	1·54	31·1	−1·3	6·332	90·97	26	33	2	10	48	11	31·0	6·230	90·97	G. S. J.	938·08	·36900	·36898	+·00002	·36899	
,,	,,	15	2	2·7093	1·55	31·2	−1·3	5·968	91·00	26	33	5	10	48	10	31·4	6·095	91·00	G. S. J.	938·04	·36891	·36889	+·00002	·36890	
,,	29	14	8	2·7090	1·54	31·1	−1·2	5·882	91·82	26	33	1	10	48	5	31·5	5·840	91·82	G. S. J.	938·10	·36894	·36894	·00000	·36894	
,,	,,	16	13	2·7098	1·53	31·9	−1·2	5·702	91·85	26	33	6	10	48	10	31·9	5·665	91·85	G. S. J.	938·14	·36886	·36884	+·00002	·36885	
JUNE	5	13	3	2·7103	1·55	32·1	−1·5	5·642	92·15	26	32	21	10	47	48	32·6	5·645	92·15	G. S. J.	937·95	·36882	·36883	−·00001	·36882	
,,	,,	15	21	2·7106	1·56	32·3	−1·5	5·458	92·15	26	32	39	10	47	55	32·5	5·547	92·15	G. S. J.	937·97	·36877	·36878	−·00001	·36877	
,,	12	13	37	2·7106	1·55	32·0	−1·3	5·602	92·70	26	32	52	10	48	1	32·0	5·512	92·70	G. S. J.	937·84	·36877	·36877	·00000	·36877	
,,	,,	15	19	2·7107	1·55	32·0	−1·3	5·361	92·67	26	33	0	10	48	7	32·0	5·397	92·67	G. S. J.	937·86	·36875	·36874	+·00001	·36874	·368820
,,	19	13	20	2·7071	1·52	27·4	−1·4	5·791	91·95	26	36	45	10	49	29	27·1	5·730	91·95	G. S. J.	937·95	·36888	·36889	−·00001	·36888	
,,	,,	15	19	2·7070	1·55	27·1	−1·4	5·555	91·95	26	36	32	10	49	32	27·1	5·625	91·95	G. S. J.	937·89	·36889	·36886	+·00003	·36887	
,,	26	13	24	2·7090	1·54	31·0	−0·6	5·694	91·35	26	33	10	10	48	11	31·4	5·653	91·35	G. S. J.	938·15	·36894	·36892	+·00002	·36893	
,,	,,	15	27	2·7103	1·54	31·9	−0·6	5·523	91·32	26	33	6	10	48	9	31·9	5·607	91·32	G. S. J.	937·97	·36879	·36878	+·00001	·36878	
JULY	3	12	51	2·7070	1·54	29·9	−0·9	6·581	90·40	26	33	15	10	48	7	29·7	6·477	90·40	G. S. J.	938·18	·36926	·36928	−·00002	·36927	
,,	,,	14	59	2·7080	1·54	29·8	,,	5·977	90·40	26	33	28	10	48	14	30·0	6·245	90·40	G. S. J.	937·95	·36906	·36906	·00000	·36906	
,,	10	13	14	2·7069	1·55	29·0	−1·6	6·210	89·60	26	34	45	10	48	46	29·2	6·163	89·60	G. S. J.	938·32	·36907	·36907	·00000	·36907	
,,	,,	15	21	2·7081	1·53	29·5	,,	5·765	89·57	26	34	54	10	48	46	29·4	5·910	89·57	G. S. J.	938·08	·36891	·36893	−·00002	·36892	
,,	17	13	23	2·7081	1·55	29·7	−1·7	6·170	89·05	26	34	27	10	48	40	29·9	5·972	89·05	G. S. J.	938·17	·36894	·36893	+·00001	·36893	
,,	,,	15	24	2·7087	1·55	30·0	,,	5·745	88·97	26	34	47	10	48	48	29·9	5·790	88·97	G. S. J.	938·10	·36884	·36882	+·00002	·36883	·368958
,,	24	13	15	2·70 6	1·55	28·7	−1·7	6·177	87·77	26	35	16	10	49	0	28·9	6·140	87·77	G. S. J.	938·12	·36893	·36891	+·00002	·36892	
,,	,,	15	29	2·7083	1·54	28·8	,,	5·815	87·80	26	35	26	10	49	7	28·9	5·942	87·80	G. S. J.	937·95	·36882	·36878	+·00004	·36880	
,,	31	13	4	2·7070	1·54	28·7	−1·6	6·400	86·60	26	35	24	10	49	6	28·8	6·207	86·60	G. S. J.	938·34	·36900	·36897	+·00003	·36898	
,,	,,	15	21	2·7080	1·56	29·0	,,	5·747	86·65	26	36	5	10	49	15	28·9	5·812	86·65	G. S. J.	938·23	·36880	·36881	−·00001	·36880	
AUG.	7	13	34	2·7080	1·55	28·6	−1·6	5·590	86·52	26	36	41	10	49	31	28·5	5·635	86·52	G. S. J.	938·23	·36874	·36873	+·00001	·36873	
,,	,,	15	25	2·7089	1·55	28·6	,,	5·455	86·55	26	36	35	10	49	28	28·6	5·610	86·55	G. S. J.	937·93	·36862	·36861	+·00001	·36861	
,,	14	13	7	2·7078	1·54	28·8	−1·5	6·070	86·22	26	35	23	10	49	1	28·9	6·087	86·22	G. S. J.	938·08	·36888	·36888	·00000	·36888	
,,	,,	15	24	2·7085	1·54	29·0	,,	5·665	86·20	26	35	37	10	49	7	29·0	5·915	86·20	G. S. J.	937·97	·36877	·36877	·00000	·36877	
,,	21	12	53	2·7083	1·54	29·0	−1·4	5·667	86·45	26	35	58	10	49	17	29·0	5·668	86·45	G. S. J.	938·15	·36877	·36874	+·00003	·36875	·368769
,,	,,	15	20	2·7089	1·54	29·1	,,	5·272	86·45	26	36	16	10	49	22	29·1	5·482	86·45	G. S. J.	938·06	·36865	·36865	·00000	·36865	
,,	28	13	13	2·7081	1·55	29·2	−1·5	6·022	86·70	26	35	7	10	48	59	29·3	5·902	86·70	G. S. J.	938·10	·36888	·36885	+·00003	·36886	
,,	,,	15	18	2·7084	1·55	29·7	,,	5·800	86·75	26	34	47	10	48	46	29·4	5·920	86·75	G. S. J.	938·02	·36890	·36890	·00000	·36890	

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1912. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	Angle of Deflection of Magnet marked 7. Distance. 30·0 cms.	Angle of Deflection of Magnet marked 7. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	Values of H. From Deflection at distance. 30·0 cms. ($H_{30\cdot0}$).	Values of H. Difference. $H_{22\cdot5}-H_{30\cdot0}$	Values of H. Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
Sept. 5	13 48	2·7077	1·66	29·3	−1·3	5·980	86·80	26 35 26	10 49 1	29·3	5·820	86·80	G. S. J.	938·30	0·36890	0·36890	·00000	0·36890	
„ „	15 32	2·7090	1·66	29·3	„	5·270	86·80	26 35 42	10 49 7	29·3	5·467	86·80	G. S. J.	937·93	·36870	·36869	+·00001	·36869	
„ 11	13 21	2·7082	1·67	29·0	−1·8	5·892	87·00	26 35 13	10 48 57	29·1	5·795	87·00	G. S. J.	937·97	·36885	·36884	+·00001	·36884	
„ „	15 30	2·7089	1·66	29·5	„	5·597	87·00	26 35 11	10 48 51	29·5	5·677	87·00	G. S. J.	937·89	·36876	·36877	−·00001	·36876	
„ 18	13 27	2·7095	1·59	29·7	−1·7	5·160	87·40	26 35 56	10 49 15	29·7	5·177	87·40	G. S. J.	938·02	·36860	·36859	+·00001	·36859	·0·368739
„ „	15 7	2·7101	1·60	29·7	„	4·810	87·40	26 36 4	10 49 19	29·7	5·082	87·40	G. S. J.	937·84	·36850	·36849	+·00001	·36849	
„ 25	12 36	2·7090	1·59	30·6	−1·8	5·787	88·20	26 33 32	10 48 22	30·8	5·702	88·20	G. S. J.	938·02	·36891	·36888	+·00003	·36889	
„ „	14 50	2·7097	1·58	30·9	„	5·235	88·20	26 34 18	10 48 30	31·0	5·387	88·20	G. S. J.	938·04	·36874	·36876	−·00002	·36875	
Oct. 1	13 44	2·7107	1·58	30·9	−1·6	4·537	88·65	26 36 23	10 49 22	30·9	4·251	88·65	G. S. J.	938·27	·36839	·36839	·00000	·36839	
„ „	15 15	2·7122	1·58	31·0	„	3·735	88·70	26 36 29	10 49 30	31·0	4·050	88·70	G. S. J.	937·86	·36817	·36815	+·00002	·36816	
„ 9	13 40	2·7080	1·60	29·1	−1·8	5·495	89·15	26 35 13	10 49 6	29·1	5·368	89·15	G. S. J.	938·10	·36888	·36883	+·00005	·36885	
„ „	15 5	2·7087	1·59	29·2	„	5·193	89·15	26 35 32	10 49 8	29·2	5·237	89·15	G. S. J.	937·99	·36876	·36873	+·00003	·36874	
„ 16	12 43	2·7090	1·58	30·4	−1·6	5·298	89·40	26 34 27	10 48 47	30·4	5·083	89·40	G. S. J.	938·14	·36882	·36878	+·00004	·36880	
„ „	14 54	2·7101	1·59	30·8	„	4·742	89·35	26 34 49	10 49 1	30·7	4·815	89·35	G. S. J.	938·06	·36864	·36857	+·00007	·36860	·368695
„ 23	12 51	2·7088	1·59	30·3	−2·0	5·431	89·35	26 34 20	10 48 40	30·1	5·256	89·35	G. S. J.	938·06	·36888	·36886	+·00002	·36887	
„ „	15 18	2·7092	1·58	30·0	„	4·948	89·37	26 35 1	10 48 53	30·2	5·053	89·37	G. S. J.	938·06	·36872	·36871	+·00001	·36871	
„ 30	12 47	2·7078	1·58	29·8	−1·7	5·620	89·30	26 34 13	10 48 34	29·8	5·508	89·30	G. S. J.	938·19	·36901	·36900	+·00001	·36900	
„ „	14 49	2·7085	1·60	30·0	„	5·277	89·30	26 34 54	10 48 52	30·0	5·368	89·30	G. S. J.	938·23	·36884	·36882	+·00002	·36883	
Nov. 6	12 57	2·7080	1·57	29·6	−1·9	5·662	89·00	26 34 36	10 48 44	29·9	5·357	89·00	G. S. J.	938·21	·36893	·36891	+·00002	·36892	
„ „	14 51	2·7094	1·56	30·2	„	4·910	89·00	26 35 2	10 48 55	30·0	5·067	89·00	G. S. J.	938·02	·36873	·36871	+·00002	·36872	
„ 13	12 41	2·7073	1·55	29·3	−1·9	5·910	88·02	26 34 2	10 48 32	30·0	5·630	88·02	G. S. J.	938·25	·36904	·36902	+·00002	·36903	
„ „	14 56	2·7089	1·57	30·0	„	5·210	88·10	26 34 48	10 48 54	29·9	5·330	88·10	G. S. J.	938·08	·36882	·36877	+·00005	·36879	
„ 20	12 42	2·7093	1·57	31·5	−1·9	5·510	88·22	26 33 7	10 48 10	31·9	5·285	88·22	G. S. J.	938·23	·36888	·36888	·00000	·36888	·368835
„ „	14 46	2·7101	1·59	31·6	„	4·915	88·25	26 33 59	10 48 31	31·6	4·960	88·25	G. S. J.	938·17	·36872	·36870	+·00002	·36871	
„ 27	13 18	2·7068	1·58	27·3	−2·1	5·390	87·60	26 36 45	10 49 35	27·6	5·257	87·60	G. S. J.	938·14	·36886	·36884	+·00002	·36885	
„ „	15 15	2·7078	1·58	28·1	„	5·210	87·60	26 36 35	10 49 32	27·9	5·152	87·60	G. S. J.	938·02	·36879	·36877	+·00002	·36878	
Dec. 4	13 14	2·7065	1·56	27·2	−2·0	5·422	86·50	26 37 5	10 49 36	27·5	5·300	86·50	G. S. J.	938·27	·36887	·36888	−·00001	·36887	
„ „	15 7	2·7079	1·58	28·0	„	5·042	86·50	26 37 0	10 49 41	27·8	5·120	86·50	G. S. J.	938·08	·36873	·36871	+·00002	·36872	
„ 11	13 35	2·7079	1·55	28·4	−2·0	5·420	86·10	26 35 49	10 49 13	28·7	5·357	86·10	G. S. J.	938·06	·36882	·36880	+·00002	·36881	
„ „	15 29	2·7078	1·57	28·9	„	5·295	86·07	26 35 41	10 49 15	28·9	5·317	86·07	G. S. J.	938·21	·36887	·36882	+·00005	·36884	
„ 18	13 43	2·7068	1·56	27·7	−2·1	5·567	85·32	26 36 20	10 49 27	27·8	5·507	85·32	G. S. J.	938·21	·36893	·36890	+·00003	·36891	·368810
„ „	15 8	2·7072	1·57	27·8	„	5·502	85·40	26 36 19	10 49 25	27·9	5·457	85· 0	G. S. J.	938·08	·36888	·36886	+·00002	·36887	
„ 24	13 53	2·7074	1·58	27·4	−2·1	5·170	84·95	26 37 29	10 49 52	27·5	5·170	84·95	G. S. J.	938·17	·36872	·36871	+·00001	·36871	
„ „	16 5	2·7077	1·56	27·8	„	5·155	84·97	26 36 57	10 49 42	27·7	5·237	84·97	G. S. J.	938·08	·36877	·36873	+·00004	·36875	
										Mean for the year				938·19			+·000014		

The mean *observed value of the Horizontal Force for the year 1912 = 0·368795

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table Ib.

Observations of Vibration and Deflection, taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.) for the determination of Absolute Horizontal Force.

1912.

1912. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Effect of 90° Torsion.	Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Angle of Deflection. Distance. 23 cms.	30 cms.	Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of H. Values of m.	From Deflection at distance. 23 cms. (H_{23}).	30 cms. (H_{30}).	Difference. $H_{23}-H_{30}$	Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
JAN. 4	12 24	2·8695	2·06	27·7	−0·2	6·945	86·10	23 47 40	10 29 10	27·5	6·872	86·10	G. S. J.	916·28	0·36883	0·36886	−·00003	0·36884	
„ 6	12 10	2·8691	2·06	27·2	−0·1	6·875	85·85	23 48 26	10 29 35	26·8	6·703	85·85	A.	916·41	·36881	·36880	+·00001	·36880	
„ 9	12 45	2·8672	2·03	26·4	0·0	7·270	85·55	23 48 0	10 29 25	26·6	7·050	85·55	G. S. J.	916·68	·36905	·36904	+·00001	·36904	
„ 11	12 34	2·8693	1·99	25·5	0·0	6·550	85·30	23 49 45	10 29 59	25·8	6·605	85·30	A.	916·11	·36857	·36860	−·00003	·36858	
„ 13	12 46	2·8692	2·06	25·7	+0·2	6·500	84·90	23 49 25	10 29 50	25·8	6·562	84·90	G. S. J.	916·09	·36865	·36868	−·00003	·36866	
„ 16	12 14	2·8679	2·02	25·6	+0·2	7·055	84·40	23 49 27	10 30 7	25·2	6·972	84·40	A.	916·47	·36886	·36882	+·00004	·36884	0·368812
„ 18	12 32	2·8691	2·07	26·6	+0·3	7·041	84·30	23 48 12	10 29 30	26·7	6·961	84·30	G. S. J.	916·20	·36880	·36878	+·00002	·36879	
„ 20	12 26	2·8694	2·04	28·4	+0·3	7·287	84·25	23 45 27	10 28 16	29·7	7·153	84·25	A.	916·30	·36898	·36899	−·00001	·36898	
„ 23	12 36	2·8704	2·12	27·9	+0·3	6·757	84·30	23 47 59	10 29 26	27·8	6·620	84·30	G. S. J.	916·26	·36866	·36865	+·00001	·36865	
„ 25	12 49	2·8692	2·06	27·7	+0·3	7·172	84·17	23 47 54	10 29 26	27·5	7·088	84·17	A.	916·52	·36885	·36882	+·00003	·36883	
„ 27	12 37	2·8699	2·06	28·8	+0·1	7·205	84·30	23 46 32	10 28 43	28·6	7·156	84·30	G. S. J.	916·30	·36891	·36892	−·00001	·36891	
„ 30	12 39	2·8695	2·11	27·5	0·0	7·020	84·50	23 47 35	10 29 21	27·2	6·992	84·50	A.	916·20	·36885	·36880	+·00005	·36882	
FEB. 1	12 55	2·8696	2·11	27·7	−0·2	7·058	84·45	23 47 35	10 29 12	27·4	6·942	84·45	G. S. J.	916·24	·36884	·36884	·00000	·36884	
„ 3	12 33	2·8689	2·09	26·2	+0·1	7·267	84·05	23 48 36	10 29 42	25·9	7·152	84·05	A.	916·14	·36881	·36878	+·00003	·36879	
„ 6	12 55	2·8674	2·08	25·6	+0·2	7·437	84·10	23 48 46	10 29 43	25·3	7·283	84·10	G. S. J.	916·39	·36899	·36898	+·00001	·36898	
„ 8	12 25	2·8682	2·10	26·3	+0·4	7·351	84·05	23 47 38	10 29 10	26·5	7·270	84·05	A.	916·16	·36897	·36899	−·00002	·36898	
„ 10	12 24	2·8696	2·09	27·2	+0·5	6·946	84·10	23 47 52	10 29 23	26·8	6·945	84·10	A.	916·09	·36882	·36880	+·00002	·36881	
„ 13	12 19	2·8686	2·09	26·8	+0·1	6·932	84·00	23 47 59	10 29 21	26·7	6·910	84·00	A.	916·33	·36890	·36891	−·00001	·36890	
„ 15	12 45	2·8687	2·07	27·0	−0·2	6·970	83·95	23 48 45	10 29 42	26·2	6·862	83·95	G. S. J.	916·45	·36885	·36885	·00000	·36885	·368922
„ 17	12 33	2·8685	2·09	27·1	−0·4	7·300	83·97	23 47 8	10 29 7	27·2	7·281	83·97	A.	916·30	·36900	·36897	+·00003	·36898	
„ 20	12 35	2·8695	2·13	27·9	−0·3	7·076	84·00	23 47 29	10 29 12	27·6	7·002	84·00	G. S. J.	916·33	·36886	·36884	+·00002	·36885	
„ 22	12 28	2·8689	2·09	28·6	0·0	7·798	84·10	23 44 28	10 27 56	28·6	7·701	84·10	A.	915·99	·36927	·36926	+·00001	·36926	
„ 24	12 32	2·8703	2·11	28·7	0·0	7·240	84·17	23 47 17	10 29 4	27·1	7·181	84·17	G. S. J.	916·05	·36889	·36889	·00000	·36889	
„ 27	12 27	2·8689	2·09	27·5	+0·3	7·055	84·17	23 46 47	10 28 42	27·8	7·006	84·17	A.	916·18	·36896	·36901	−·00005	·36898	
„ 29	11 41	2·8696	2·11	27·6	+0·3	7·146	84·20	23 48 9	10 29 24	26·2	7·270	84·20	G. S. J.	916·11	·36887	·36888	−·00001	·36887	
MARCH 5	12 33	2·8685	2·11	26·6	+0·4	7·315	84·10	23 47 20	10 29 5	26·5	7·268	84·10	G S. J.	916·07	·36899	·36900	−·00001	·36899	
„ 7	12 38	2·8684	2·10	27·0	+0·4	7·425	84·22	23 47 6	10 29 2	27·3	7·268	84·22	A.	916·30	·36899	·36899	·00000	·36899	
„ 9	12 44	2·8693	2·21	26·9	+0·2	6·791	84·20	23 48 21	10 29 33	26·8	6·685	84·20	G. S. J.	916·24	·36876	·36875	+·00001	·36875	
„ 12	13 16	2·8700	2·22	28·5	+0·1	6·932	84·40	23 46 12	10 28 35	28·6	6·907	84·40	A.	916·09	·36890	·36891	−·00001	·36890	
„ 14	12 37	2·8695	2·23	28·7	+0·2	7·347	84·50	23 46 6	10 28 32	28·3	7·176	84·50	G. S. J.	916·18	·36902	·36904	−·00002	·36903	
„ 16	12 33	2·8688	2·29	28·0	+0·2	7·105	84·65	23 46 10	10 28 31	28·1	7·050	84·65	A.	916·20	·36906	·36909	−·00003	·36907	·368981
„ 18	12 43	2·8688	2·28	28·2	+0·1	7·252	84·82	23 46 55	10 28 53	27·5	7·117	84·82	G. S. J.	916·35	·36904	·36905	−·00001	·36904	
„ 20	12 45	2·8686	2·26	27·3	0·0	7·312	85·17	23 46 47	10 28 48	27·1	7·185	85·17	A.	916·09	·36905	·36906	−·00001	·36905	
„ 23	12 36	2·8704	2·20	28·7	−0·2	6·812	85·27	23 46 15	10 28 40	28·1	6·650	85·27	G. S. J.	915·93	·36892	·36891	+·00001	·36891	
„ 26	12 33	2·8692	2·21	28·9	0·0	7·167	85·70	23 45 31	10 28 14	29·0	7·075	85·70	A.	916·28	·36909	·36912	−·00003	·36910	
„ 28	13 3	2·8690	2·26	28·3	−0·1	7·222	85·77	23 45 46	10 28 29	28·2	7·010	85·77	G. S. J.	916·16	·36910	·36909	+·00001	·36909	
„ 30	12 24	2·8713	2·34	29·8	0·0	6·670	85·80	23 45 21	10 28 16	29·6	6·530	85·80	A.	915·90	·36886	·36885	+·00001	·36885	

* The monthly and annual means corrected for diurnal variations appear in Table VIIIa.

1912. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Effect of 90° Torsion.	Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Angle of Deflection. Distance. 23 cms.	30 cms.	Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of H. Values of m.	From Deflection at distance. 23 cms. (H_{23}).	30 cms. (H_{30}).	Difference. $H_{23}-H_{30}$	Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
April 2	12 14	2·8693	2·32	29·2	0·0	7·420	86·10	23 45 10	10 28 10	28·5	7·216	86·10	G. S. J.	916·09	0·36918	0·36918	·00000	0·36918	
„ 4	12 23	2·8697	2·40	29·8	−0·4	7·122	86·40	23 44 58	10 28 7	29·5	6·[illegible]27	86·40	A.	916·26	·36911	·36911	·00000	·36911	
„ 9	12 27	2·8714	2·40	30·9	−1·0	6·690	86·72	23 44 58	10 28 2	30·6	6·632	86·72	A.	916·18	·36888	·36891	−·00003	·36889	
„ 11	13 54	2·8713	2·47	29·8	−1·2	6·505	87·07	23 45 41	10 28 23	29·5	6·415	87·07	G. S. J.	915·95	·36880	·36881	−·00001	·36880	
„ 13	12 25	2·8706	2·49	30·0	−1·4	6·361	87·37	23 44 46	10 27 57	30·4	6·236	87·37	A.	916·11	·36894	·36897	−·00003	·36895	
„ 15	13 31	2·8733	2·43	30·3	−1·3	5·155	87·70	23 48 1	10 29 30	29·7	4·900	87·70	G. S. J.	916·22	·36829	·36826	+·00003	·36827	0·368910
„ 17	12 37	2·8708	2·42	30·2	−1·1	6·690	87·85	23 45 1	10 28 6	29·8	6·512	87·85	A.	916·07	·36896	·36897	−·00001	·36896	
„ 20	12 33	2·8716	2·48	30·8	−0·9	6·457	88·10	23 45 4	10 28 5	30·0	6·372	88·10	G. S. J.	915·99	·36890	·36892	−·00002	·36891	
„ 23	12 23	2·8712	2·52	30·7	−1·0	6·357	88·40	23 45 5	10 28 2	30·1	6·322	88·40	A.	916·07	·36892	·36895	−·00003	·36893	
„ 25	12 47	2·8717	2·53	31·3	−0·9	6·376	88·67	23 44 47	10 27 52	30·8	6·292	88·67	G. S. J.	916·11	·36888	·36892	−·00004	·36890	
„ 27	12 33	2·8705	2·43	30·5	−1·2	6·465	88·80	23 44 37	10 28 11	30·0	6·285	88·80	A.	916·20	·36905	·36899	+·00006	·36902	
„ 30	13 0	2·8706	2·21	30·2	−1·1	6·605	89·10	23 45 1	10 28 7	29·8	6·456	89·10	G. S. J.	916·16	·36906	·36900	·00000	·36900	
May 2	12 35	2·8720	2·15	30·8	−1·1	5·921	89·20	23 45 10	10 28 11	30·5	5·910	89·20	A.	916·07	·36880	·36881	−·00001	·36880	
„ 4	11 53	2·8720	2·14	31·0	−1·0	6·295	89·40	23 44 31	10 27 47	30·7	6·263	89·40	G. S. J.	915·93	·36888	·36892	−·00004	·36890	
„ 7	12 23	2·8712	2·20	30·9	−1·3	6·536	89·65	23 44 46	10 27 50	30·2	6·427	89·65	A.	916·07	·36899	·36905	−·00006	·36902	
„ 9	13 24	2·8712	2·16	30·8	−1·2	6·408	89·90	23 44 35	10 27 52	30·5	6·192	89·90	G. S. J.	916·11	·36898	·36899	−·00001	·36898	
„ 11	13 4	2·8710	2·13	30·1	−1·2	6·390	90·02	23 44 20	10 27 47	30·1	6·315	90·02	A.	915·86	·36900	·36902	−·00002	·36901	·368893
„ 13	12 58	2·8717	2·18	30·6	−1·1	5·945	90·27	23 45 36	10 28 22	30·2	5·470	90·27	G. S. J.	916·18	·36880	·36880	·00000	·36880	
„ 20	12 47	2·8724	2·14	31·8	−1·3	6·127	90·80	23 43 51	10 27 32	31·0	6·057	90·80	G. S. J.	915·84	·36896	·36899	−·00003	·36897	
„ „	16 22	2·8733	2·09	31·4	„	5·678	90·82	23 43 53	10 27 40	31·0	5·852	90·82	G. S. J.	915·52	·36880	·36879	+·00001	·36879	
„ 27	12 39	2·8731	2·14	31·7	−1·2	5·920	91·60	23 43 26	10 27 40	31·3	5·812	91·60	G. S. J.	915·63	·36888	·36882	+·00006	·36885	
„ „	14 55	2·8733	2·15	31·6	„	5·597	91·60	23 43 37	10 27 45	31·0	5·630	91·60	G. S. J.	915·55	·36885	·36878	+·00007	·36881	
								Mean of	the months	from	January	to May		916·14			−·000002		
June 3	13 6	2·8725	2·16	31·7	−1·5	5·830	92·10	23 44 34	10 27 46	30·9	5·627	92·10	G. S. J.	915·95	·36885	·36890	−·00005	·36887	
„ „	15 24	2·8735	2·16	31·7	„	5·345	92·10	23 43 49	10 27 48	31·4	5·450	92·10	G. S. J.	915·63	·36877	·36871	+·00006	·36874	
„ 10	13 18	2·8729	2·56	31·9	−1·4	5·737	92·37	23 43 26	10 27 35	31·6	5·669	92·37	G. S. J.	915·71	·36886	·36882	+·00004	·36884	
„ „	15 26	2·8733	2·52	31·7	„	5·296	92·40	23 43 55	10 27 32	31·5	5·480	92·40	G. S. J.	915·59	·36875	·36878	−·00003	·36876	†·368844
„ 17	13 36	2·8708	2·03	28·9	−1·3	6·067	92·50	23 44 45	10 27 58	28·9	6·020	92·50	G. S. J.	915·57	·36899	·36900	−·00001	·36899	
„ „	15 45	2·8712	1·91	28·8	„	5·592	92·50	23 45 11	10 28 16	28·7	5·776	92·50	G. S. J.	915·55	·36890	·36888	+·00002	·36889	
„ 24	13 19	†2·8783	1·87	29·5	−0·7	5·916	91·40	23 37 36	10 24 56	29·5	5·693	91·40	G. S. J.	†911·28	·3[illegible]891	·36893	†−·00002	†·36892	
„ „	15 41	2·8795	1·84	29·7	„	5·346	91·40	23 37 54	10 25 7	29·6	5·371	91·40	G. S. J.	9[illegible]1·09	·3[illegible]874	·36874	·00000	·36874	

July	1	13	19	2·8785	1·83	29·7	−1·0	6·035	90·50	23	37	16	10	24	56	29·7	5·865	90·50	G. S. J.	911·23	·36892	·36890	+·00002	·36891	·368913
,,	,,	15	32	2·8789	1·82	29·7	,,	5·527	90·50	23	37	25	10	25	11	29·7	5·585	90·50	G. S. J.	911·23	·36885	·36878	+·00007	·36881	
,,	9	13	36	2·8778	1·80	28·4	−1·7	6·002	89·40	23	38	22	10	25	28	28·1	5·8 6	89·40	G. S. J.	911·19	·36892	·36888	+·00004	·36890	
,,	,,	15	32	2·8779	1·84	27·9	,,	5·457	89·40	23	38	41	10	25	41	27·9	5·667	89·40	G. S. J.	911·13	·36883	·36877	+·00006	·36880	
,,	15	12	37	2·8771	1·80	29·5	−1·7	6·452	89·22	23	36	31	10	24	41	29·0	6·407	89·22	G. S. J.	911·20	·36924	·36921	+·00003	·36922	
,,	,,	15	45	2·8786	1·79	29·5	,,	5·672	89·15	23	37	10	10	25	3	29·2	5·922	89·15	G. S. J.	911·09	·36895	·36888	+·00007	·36891	
,,	22	13	30	2·8761	1·78	26·8	−1·7	6·043	87·82	23	39	29	10	25	53	27·1	5·885	87·82	G. S. J.	911·51	·36896	·36893	+·00003	·36894	
,,	,,	15	39	2·8778	1·80	27·1	,,	5·560	87·75	23	39	43	10	26	5	27·1	5·665	87·75	G. S. J.	911·13	·36873	·36867	+·00006	·36870	
,,	29	13	29	2·8757	1·75	27·1	−1·4	6·612	86·97	23	39	2	10	25	48	26·5	6·302	86·97	G. S. J.	911·46	·36914	·36909	+·00005	·36911	
,,	,,	15	33	2·8769	1·79	26·3	,,	5·805	86·90	23	39	39	10	26	7	26·2	6·027	86·90	G. S. J.	911·07	·36887	·36879	+·00008	·36883	
Aug.	5	13	28	2·8771	1·72	27·7	−1·6	5·925	86·62	23	38	51	10	25	50	27·4	5·805	86·62	G. S. J.	911·36	·36896	·36888	+·00008	·36892	·368847
,,	,,	15	29	2·8775	1·71	27·2	,,	5·587	86·60	23	39	47	10	26	5	26·9	5·671	86·60	G. S. J.	911·21	·36878	·36874	+·00004	·36876	
,,	12	13	25	2·8778	1·71	28·2	−1·6	5·995	86·30	23	38	23	10	25	30	28·2	5·830	86·30	G. S. J.	911·21	·36889	·36885	+·00004	·36887	
,,	,,	15	25	2·8782	1·67	28·0	,,	5·545	86·30	23	38	38	10	25	42	28·0	5·660	86·30	G. S. J.	911·13	·36882	·36874	+·00008	·36878	
,,	19	12	51	2·8777	1·66	28·9	−1·5	5·877	86·32	23	37	47	10	25	23	28·5	5·885	86·32	G. S. J.	911·32	·36901	·36893	+·00008	·36897	
,,	,,	15	26	2·8787	1·64	28·6	,,	5·515	86·32	23	38	5	10	25	32	28·5	5·642	86·32	G. S. J.	911·05	·36882	·36872	+·00010	·36877	
,,	26	13	9	2·8781	1·65	28·9	−1·4	5·893	86·75	23	37	15	10	25	16	28·7	5·710	86·75	G. S. J.	911·13	·36900	·36889	+·00011	·36894	
,,	,,	15	19	2·8788	1·64	28·8	,,	5·450	86·75	23	38	2	10	25	27	28·8	5·522	86·75	G. S. J.	911·11	·36881	·36873	+·00008	·36877	
Sept.	2	12	39	2·8763	1·65	27·9	−1·2	6·382	86·45	23	38	1	10	25	25	27·5	6·267	86·45	G. S. J.	911·40	·36917	·36911	+·00006	·36914	·368928
,,	,,	14	41	2·8775	1·65	27·8	,,	5·935	86·45	23	37	58	10	25	20	27·5	6·100	86·45	G. S. J.	910·94	·36901	·36896	+·00005	·36898	
,,	9	13	8	2·8773	1·62	28·0	−1·7	5·975	86·90	23	37	58	10	25	27	27·9	5·730	86·90	G. S. J.	911·19	·36901	·36894	+·00007	·36897	
,,	,,	15	16	2·8784	1·66	28·1	,,	5·325	86·90	23	38	13	10	25	31	28·1	5·497	86·90	G. S. J.	910·96	·36884	·36877	+·00007	·36880	
,,	16	13	19	2·8792	1·27	29·3	−1·8	5·587	87·30	23	37	46	10	25	25	28·8	5·520	87·30	G. S. J.	911·09	·36886	·36876	+·00010	·36881	
,,	,,	15	23	2·8792	1·65	29·0	,,	5·302	87·30	23	38	11	10	25	36	28·8	5·410	87·30	G. S. J.	911·09	·36876	·36865	+·00011	·36870	
,,	23	12	58	2·8773	1·76	29·2	−1·8	6·205	87·95	23	36	22	10	24	53	29·4	5·652	87·95	G. S. J.	911·30	·36917	·36905	+·00012	·36911	
,,	,,	15	15	2·8780	1·68	29·6	,,	5·597	87·95	23	37	11	10	25	7	29·6	5·612	87·95	G. S. J.	911·44	·36901	·36893	+·00008	·36897	
,,	30	13	59	2·8783	2·01	29·8	−1·6	5·565	88·60	23	36	58	10	24	57	29·6	5·546	88·60	G. S. J.	911·23	·36899	·36893	+·00006	·36896	
,,	,,	15	35	2·8793	1·96	29·8	,,	5·252	88·60	23	36	48	10	24	55	29·7	5·435	88·60	G. S. J.	910·92	·36888	·36881	+·00007	·36884	
Oct.	7	13	3	2·8774	1·85	29·4	−1·6	5·795	89·10	23	37	4	10	25	0	29·0	5·677	89·10	G. S. J.	911·38	·36912	·36906	+·00006	·36909	·368878
,,	,,	14	58	2·8784	1·82	29·4	,,	5·501	89·10	23	37	3	10	25	4	29·2	5·590	89·10	G. S. J.	911·13	·36899	·36890	+·00009	·36894	
,,	14	12	45	2·8781	1·86	29·6	−1·9	5·386	89·20	23	37	37	10	25	14	29·5	5·073	89·20	G. S. J.	911·16	·36894	·36888	+·00006	·36891	
,,	,,	15	0	2·8794	1·82	29·5	,,	4·552	89·20	23	38	20	10	25	31	29·5	4·791	89·20	G. S. J.	911·26	·36868	·36862	+·00006	·36865	
,,	28	12	53	2·8786	1·80	29·9	−1·8	5·636	89·45	23	36	46	10	24	51	29·9	5·243	89·45	G. S. J.	911·21	·36898	·36892	+·00006	·36895	
,,	,,	14	37	2·8798	1·83	29·8	,,	4·956	89·47	23	36	57	10	25	5	29·9	5·023	89·47	G. S. J.	910·92	·36879	·36868	+·00011	·36873	
Nov.	4	13	1	2·8781	1·84	29·5	−1·9	5·395	89·00	23	37	27	10	25	7	29·2	5·202	89·00	G. S. J.	911·30	·36897	·36893	+·00004	·36895	·368789
,,	,,	15	15	2·8792	1·83	29·6	,,	5·157	89·02	23	37	21	10	25	7	29·5	5·147	89·02	G. S. J.	911·05	26883	·36877	+·00006	·36880	
,,	11	13	3	2·8783	1·96	28·6	−1·9	5·160	88·30	23	38	25	10	25	33	28·7	4·945	88·30	G. S. J.	911·23	·36879	·36874	+·00005	·36876	
,,	,,	14	58	2·8794	2·01	28·7	,,	4·700	88·32	23	38	33	10	25	42	28·8	4·842	88·32	G. S. J.	911·00	·36863	·36854	+·00009	·36858	
,,	18	13	0	2·8794	1·91	31·0	−1·9	5·457	88·22	23	36	4	10	24	40	30·7	5·330	88·22	G. S. J.	911·17	·36897	·36888	+·00009	·36892	
,,	,,	15	18	2·8801	1·82	30·7	,,	5·062	88·27	23	36	26	10	24	48	30·8	5·147	88·27	G. S. J.	911·02	·36881	·36872	+·00009	·36876	
,,	25	13	0	2·8769	1·84	26·7	−2·0	5·207	87·80	23	39	22	10	26	1	27·0	5·060	87·80	G. S. J.	911·23	·36887	·36878	+·00009	·36882	
,,	,,	15	13	2·8778	1·87	26·9	,,	5·025	87·82	23	39	22	10	25	57	27·1	5·032	87·82	G. S. J.	910·98	·36875	·36869	+·00006	·36872	
Dec.	3	13	54	2·8776	2·04	26·8	−2·0	5·325	86·50	23	38	42	10	25	40	27·2	5·235	86·50	G. S. J.	910·81	·36883	·36877	+·00006	·36880	·368850
,,	,,	15	45	2·8774	1·91	27·5	,,	5·290	86·55	23	38	34	10	25	45	27·5	5·272	86·55	G. S. J.	911·11	·36891	·36881	+·00010	·36886	
,,	9	13	21	2·8779	1·92	28·2	−2·2	5·407	86·12	23	38	21	10	25	31	28·4	5·167	86·12	G. S. J.	911·19	·36885	·36879	+·00006	·36882	
,,	,,	15	19	2·8784	1·82	28·3	,,	4·987	86·15	23	38	19	10	25	35	28·5	5·120	86·15	G. S. J.	911·11	·36880	·36871	+·00009	·36875	
,,	16	13	7	2·8769	1·93	27·7	−2·0	5·427	85·52	23	37	49	10	25	21	28·0	5·295	85·52	G. S. J.	911·19	·36905	·36897	+·00008	·36901	
,,	,,	14	51	2·8773	2·22	27·8	,,	5·417	85·57	23	37	28	10	25	17	28·4	5·337	85·57	G. S. J.	911·00	·36898	·36888	+·00010	·36893	
,,	23	12	46	2·8774	1·81	27·5	−2·1	5·365	85·02	23	39	2	10	25	47	27·8	4·947	85·02	G. S. J.	911·30	·36883	·36878	+·00005	·36880	
,,	,,	15	14	2·8785	1·98	27·7	,,	4·822	85·02	23	39	7	10	25	51	27·7	4·985	85·02	G. S. J.	910·96	·36870	·36864	+·00006	·36867	
,,	30	14	2	2·8768	1·83	27·4	−2·2	5·491	84·47	23	37	54	10	25	17	27·8	5·467	84·47	G. S. J.	911·11	·36904	·36899	+·00005	·36901	
,,	,,	15	43	2·8781	1·91	27·7	,,	5·290	84·55	23	37	31	10	25	22	28·1	5·430	84·55	G. S. J.	910·77	·36891	·36880	+·00011	·36885	
																		Mean of the months from July to December			911·16			+·000068	

† The mean* observed value of the Horizontal Force .. { January to June 1912 = 0·368894; July to December 1912 = 0·368867 }

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

† Change in the magnet conditions was noted on the 18th June due to a mishap. The magnet appears to have received some knock unknown to the observer which has altered the moment, distribution and the zero, *vide* Introduction.

Absolute Magnetical Observations, Alibag—Table IIa.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1912.

Taken with Magnetometer No. 7 (T. Cooke and Sons.)

1912. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently. Erect.	Inverted.	Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Kennery Light House.	Torsion. Mean.	Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Monthly Mean. Absolute Easterly Declination corrected for Torsion.	Corresponding Reading of Declination Magnetograms.	*Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JAN. 3	13 44	55·6	..	85 22 10	222 22 35	0	..	G. S. J.	5·687	0 53 0		
„ 5	13 47	55·6	..	85 23 25	222 22 50	0	..	A.	5·787	0 54 0		
„ 8	13 44	55·6	..	85 23 10	222 22 30	0	..	G. S. J.	5·790	0 54 5		
„ 12	13 37	55·6	..	85 20 45	222 22 30	0	..	G. S. J.	5·547	0 51 40		
„ 15	13 37	55·6	..	85 22 25	222 22 55	0	..	A.	5·680	0 52 55		
„ 17	13 44	55·6	..	85 22 10	222 22 40	0	..	G. S. J.	5·690	0 52 55		
„ 19	14 2	55·6	..	85 22 5	222 22 45	0	..	A.	5·650	0 52 45	5·676	0 52 52
„ 22	13 44	55·6	..	85 22 25	222 22 40	0	..	G. S. J.	5·710	0 53 10		
„ 24	13 44	55·6	..	85 22 5	222 23 0	0	..	A.	5·657	0 52 30		
„ 26	14 0	55·6	..	85 22 5	222 22 35	0	..	G. S. J.	5·660	0 52 55		
„ 29	13 37	55·6	..	85 21 45	222 22 50	0	..	A.	5·625	0 52 20		
„ 31	13 44	55·6	..	85 21 30	222 22 40	0	..	G. S. J.	5·625	0 52 15		
FEB. 2	13 44	55·6	..	85 21 50	222 22 55	0	..	A.	5·660	0 52 20		
„ 5	14 15	55·6	..	85 21 50	222 22 30	0	..	G. S. J.	5·680	0 52 45		
„ 7	14 10	55·6	..	85 21 45	222 22 40	0	..	A.	5·655	0 52 30		
„ 9	13 44	55·6	..	85 20 55	222 23 0	0	..	G. S. J.	5·560	0 51 20		
„ 12	13 51	55·6	..	85 23 0	222 23 25	0	..	A.	5·675	0 53 0		
„ 14	14 15	55·6	..	85 21 5	222 23 0	0	..	G. S. J.	5·580	0 51 30	5·620	0 51 58
„ 19	13 34	55·6	..	85 21 5	222 23 0	0	..	G. S. J.	5·570	0 51 30		
„ 21	13 44	55·6	..	85 21 55	222 23 25	0	..	A.	5·605	0 51 55		
„ 23	13 44	55·6	..	85 21 10	222 23 10	0	..	G. S. J.	5·590	0 51 25		
„ 26	13 55	55·6	..	85 21 40	222 23 25	0	..	A.	5·610	0 51 40		
„ 28	13 44	55·6	..	85 21 30	222 23 10	0	..	G. S. J.	5·630	0 51 45		
MARCH 1	13 44	55·6	..	85 21 40	222 23 35	0	..	A.	5·620	0 51 30		
„ 4	14 6	55·6	..	85 21 25	222 23 5	0	..	G. S. J.	5·645	0 51 45		
„ 6	13 44	55·6	..	85 21 15	222 23 15	0	..	A.	5·585	0 51 25		
„ 8	13 44	55·6	..	85 20 25	222 23 10	0	..	G. S. J.	5·525	0 50 40		
„ 11	13 44	55·6	..	85 20 40	222 23 35	0	..	A.	5·530	0 50 30		
„ 13	13 44	55·6	..	85 21 5	222 23 10	0	..	G. S. J.	5·600	0 51 20		
„ 15	11 31	55·6	..	85 22 10	222 23 10	0	..	G. S. J.	5·590	0 52 25	5·557	0 51 4
„ 19	13 21	55·6	..	85 18 40	222 23 0	0	..	G. S. J.	5·350	0 49 5		
„ 21	13 42	55·6	..	85 21 0	222 23 35	0	..	A.	5·500	0 50 50		
„ 22	13 44	55·6	..	85 20 40	222 23 10	0	..	G. S. J.	5·535	0 50 55		
„ 25	13 44	55·6	..	85 21 10	222 23 30	0	..	A.	5·550	0 51 5		
„ 29	13 44	55·6	..	85 21 15	222 23 20	0	..	A.	5·560	0 51 20		
APRIL 1	13 44	55·6	..	85 19 20	222 23 0	0	..	G. S. J.	5·410	0 49 45		
„ 3	13 44	55·6	..	85 20 30	222 23 35	0	..	A.	5·467	0 50 20		
„ 8	13 44	55·6	..	85 20 45	222 23 30	0	..	A.	5·470	0 50 40		
„ 10	13 44	55·6	..	85 20 30	222 23 0	0	..	G. S. J.	5·495	0 50 55		
„ 12	13 44	55·6	..	85 20 20	222 23 15	0	..	A.	Not available.	0 50 30		
„ 16	13 27	55·6	..	85 21 55	222 22 55	0	..	G. S. J.	5·640	0 52 25	5·466	0 50 45
„ 18	13 44	55·6	..	85 20 35	222 23 0	0	..	A.	5·475	0 51 0		
„ 19	13 44	55·6	..	85 21 25	222 22 55	0	..	G. S. J.	5·560	0 51 55		
„ 22	13 44	55·6	..	85 21 10	222 23 15	0	..	A.	5·500	0 51 20		
„ 24	13 44	55·6	..	85 20 30	222 22 50	0	..	G. S. J.	5·470	0 51 5		
„ 26	13 45	55·6	..	85 19 35	222 23 5	0	..	A.	5·347	0 49 55		
„ 29	13 56	55·6	..	85 18 35	222 22 55	0	..	G. S. J.	5·295	0 49 5		
MAY 1	14 34	55·6	..	85 20 10	222 22 55	0	..	A.	5·410	0 50 40		
„ 3	13 13	55·6	..	85 18 20	222 22 40	0	..	G. S. J.	5·285	0 49 5		
„ 6	14 41	55·6	..	85 20 35	222 22 55	0	..	A.	5·475	0 51 5		
„ 10	14 57	55·6	..	85 21 30	222 22 55	0	..	A.	5·500	0 52 0		
„ 14	13 36	55·6	..	85 19 40	222 22 45	0	..	G. S. J.	5·380	0 50 20		
„ 15	16 24	55·6	..	85 22 50	222 23 10	0	..	A.	5·680	0 53 5	5·402	0 50 28
„ 16	12 45	55·6	..	85 19 10	222 22 55	0	..	G. S. J.	5·340	0 49 40		
„ 23	12 39	55·6	..	85 17 35	222 23 0	0	..	G. S. J.	5·170	0 48 0		
„ 30	13 45	55·6	..	85 19 35	222 22 45	0	..	G. S. J.	5·375	0 50 15		
JUNE 6	13 21	55·6	..	85 17 35	222 22 55	0	..	G. S. J.	5·172	0 48 5		
„ 13	12 13	55·6	..	85 18 30	222 22 35	0	..	G. S. J.	5·295	0 49 20		
„ 20	13 45	55·6	..	85 18 20	222 22 50	0	..	G. S. J.	5·285	0 48 55	5·288	0 49 11
„ 27	13 47	55·6	..	85 20 0	222 23 0	0	..	G. S. J.	5·400	0 50 25		

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1912. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Inverted.	Horizontal Circle with Telescope pointed to: Scale of Collimator Magnet.	Kennery Light House.	Torsion. Mean.	Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	*Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JULY 4	13 7	55·6	..	85 18 15	222 22 55	0	..	G. S. J.	5·290	0 48 45	5·323	0 48 54
,, 11	12 29	55·6	..	85 18 35	222 23 0	0	..	G. S. J.	5·320	0 49 0		
,, 18	11 35	55·6	..	85 18 20	222 23 0	0	..	G. S. J.	5·320	0 48 45		
,, 25	12 39	55·6	..	85 18 45	222 23 5	0	..	G. S. J.	5·362	0 49 5		
AUG. 1	13 8	55·6	..	85 19 45	222 23 15	0	..	G. S. J.	5·475	0 49 55	5·372	0 48 39
,, 8	13 36	55·6	..	85 18 30	222 23 15	0	..	G. S. J.	5·367	0 48 40		
,, 15	11 43	55·6	..	85 19 5	222 23 30	0	..	G. S. J.	5·400	0 49 0		
,, 22	13 14	55·6	..	85 18 50	222 23 45	0	..	G. S. J.	5·365	0 48 30		
,, 29	13 46	55·6	..	85 17 40	222 23 55	0	..	G. S. J.	5·255	0 47 10		
SEPT. 6	13 30	55·6	..	85 19 45	222 24 0	0	..	G. S. J.	5·425	0 49 10	5·356	0 48 24
,, 12	13 11	55·6	..	85 18 15	222 24 5	0	..	G. S. J.	5·325	0 47 35		
,, 19	13 20	55·6	..	85 18 25	222 23 55	0	..	G. S. J.	5·325	0 47 55		
,, 26	13 27	55·6	..	85 19 15	222 23 55	0	..	G. S. J.	5·350	0 48 45		
OCT. 3	13 10	55·6	..	85 19 35	222 24 15	0	..	G. S. J.	5·400	0 48 45	5·416	0 49 18
,, 10	12 6	55·6	..	85 20 0	222 24 5	0	..	G. S. J.	5·395	0 49 20		
,, 18	12 12	55·6	..	85 19 55	222 24 5	0	..	G. S. J.	5·395	0 49 15		
,, 24	12 50	55·6	..	85 19 40	222 23 55	0	..	G. S. J.	5·402	0 49 10		
,, 31	12 53	55·6	..	85 20 30	222 23 55	0	..	G. S. J.	5·490	0 50 0		
NOV. 7	13 16	55·6	..	85 21 30	222 23 40	0	..	G. S. J.	5·640	0 51 15	5·545	0 50 14
,, 14	13 45	55·6	..	85 20 20	222 23 40	0	..	G. S. J.	5·535	0 50 5		
,, 21	15 3	55·6	..	85 19 55	222 23 45	0	..	G. S. J.	5·465	0 49 35		
,, 28	13 46	55·6	..	85 20 35	222 24 0	0	..	G. S. J.	5·540	0 50 0		
DEC. 5	12 54	55·6	..	85 21 15	222 25 5	0	..	G. S. J.	5·600	0 50 35	5·589	0 50 4
,, 12	13 18	55·6	..	85 21 25	222 24 25	0	..	G. S. J.	5·635	0 50 25		
,, 19	13 6	55·6	..	85 20 25	222 24 20	0	..	G. S. J.	5·515	0 49 30		
,, 26	13 27	55·6	..	85 20 55	222 24 35	0	..	G. S. J.	5·605	0 49 45		

The Mean * observed Declination for the year 1912 = 0° 50′ 9″

* The monthly and annual mean corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table IIb.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1912.

Taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.)

1912. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Mean Readings. Collimator Magnet. Scale apparently Inverted.	Mean Readings. Horizontal Circle with Telescope pointed to Scale of Collimator Magnet.	Mean Readings. Horizontal Circle with Telescope pointed to Kennery Light House.	Torsion. Mean.	Torsion. Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms	Monthly Mean. *Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JAN. 4	11 4	33·95	34·22	276 21 25	53 23 25	0	..	G. S. J.	5·612	0 51 10		
„ 6	11 14	34·00	34·15	276 21 45	53 23 20	0	..	A.	5·622	0 51 42		
„ 9	11 32	33·90	34·30	276 18 30	53 23 30	0	..	G. S. J.	5·317	0 48 2		
„ 11	11 22	33·92	34·15	276 19 45	53 23 15	0	..	A.	5·485	0 49 42		
„ 13	11 29	33·90	34·37	276 21 25	53 23 30	0	..	G. S. J.	5·602	0 50 54		
„ 16	11 20	34·02	33·90	276 21 25	53 23 40	0	..	A.	5·655	0 51 17	5·548	0 50 17
„ 18	11 8	34·00	34·22	276 20 45	53 23 30	0	..	G. S. J.	5·570	0 50 27		
„ 20	11 30	34·00	34·15	276 19 45	53 23 30	0	..	A.	5·518	0 49 32		
„ 23	11 30	34·10	34·17	276 20 10	53 22 55	0	..	G. S. J.	5·577	0 50 37		
„ 25	11 26	34·10	34·09	276 19 5	53 23 25	0	..	A.	5·460	0 49 5		
„ 27	11 24	33·92	34·22	276 20 35	53 23 15	0	..	G. S. J.	5·591	0 50 28		
„ 30	11 25	34·07	34·06	276 20 15	53 23 5	0	..	A.	5·567	0 50 35		
FEB. 1	11 34	33·90	34·61	276 21 5	53 22 55	0	..	G. S. J.	5·645	0 50 55		
„ 3	11 26	34·10	34·05	276 21 35	53 23 30	0	..	A.	5·703	0 51 32		
„ 6	11 47	33·97	34·22	276 18 55	53 22 45	0	..	G. S. J.	5·457	0 49 21		
„ 8	11 20	34·05	33·87	276 18 30	53 23 10	0	..	A.	5·386	0 48 55		
„ 10	11 27	33·82	34·15	276 18 40	53 22 55	0	..	A.	5·412	0 48 52		
„ 13	11 27	34·00	34·20	276 18 35	53 22 55	0	..	A.	5·457	0 48 54		
„ 15	11 27	33·90	34·05	276 19 55	53 22 45	0	..	G. S. J.	5·580	0 50 27	5·557	0 50 8
„ 17	11 28	34·02	33·95	276 18 20	53 23 15	0	..	A.	5·410	0 48 33		
„ 20	11 30	34·00	34·02	276 19 45	53 22 55	0	..	G. S. J.	5·558	0 50 14		
„ 22	11 17	34·05	33·72	276 19 5	53 23 10	0	..	A.	5·530	0 49 38		
„ 24	11 24	34·00	34·05	276 20 10	53 22 55	0	..	G. S. J.	5·602	0 50 38		
„ 27	11 21	34·00	33·67	276 21 20	53 22 40	0	..	A.	5·800	0 52 23		
„ 29	10 29	34·12	33·65	276 20 35	53 23 0	0	..	G. S. J.	5·701	0 51 26		
MAR. 5	11 26	34·05	34·12	276 19 40	53 23 0	0	..	G. S. J.	5·625	0 50 2		
„ 7	11 27	33·75	34·65	276 23 20	53 22 50	0	..	A.	5·835	0 53 3		
„ 9	11 35	33·97	34·20	276 20 10	53 23 0	0	..	G. S. J.	5·610	0 50 22		
„ 12	11 31	34·00	33·97	276 20 25	53 23 30	0	..	A.	5·641	0 50 21		
„ 14	11 32	33·92	34·30	276 22 25	53 23 10	0	..	G. S. J.	5·780	0 52 18		
„ 18	11 28	33·95	34·35	276 21 50	53 23 0	0	..	G. S. J.	5·716	0 51 52	5·672	0 51 7
„ 20	11 33	34·06	34·10	276 19 25	53 22 45	0	..	A.	5·545	0 50 3		
„ 23	11 21	33·90	34·47	276 21 40	53 22 55	0	..	G. S. J.	5·720	0 51 38		
„ 26	11 29	33·97	34·10	276 21 5	53 22 55	0	..	A.	5·677	0 51 28		
„ 28	11 41	33·75	34·45	276 20 35	53 22 50	0	..	G. S. J.	5·630	0 50 46		
„ 30	11 23	34·02	34·00	276 20 25	53 23 25	0	..	A.	5·615	0 50 26		
APRIL 2	11 24	33·82	34·42	276 19 35	53 22 45	0	..	G. S. J.	5·466	0 49 41		
„ 4	11 22	34·00	34·17	276 19 55	53 23 0	0	..	A.	5·565	0 50 11		
„ 9	11 30	33·97	34·17	276 20 0	53 22 45	0	..	A.	5·582	0 50 29		
„ 11	12 28	33·96	34·30	276 18 20	53 23 0	0	..	G. S. J.	5·335	0 48 26		
„ 13	11 21	33·95	34·45	276 20 0	53 23 10	0	..	A.	5·520	0 49 46		
„ 15	12 17	34·02	34·22	276 19 25	53 23 0	0	..	G. S. J.	5·432	0 49 39		
„ 17	11 37	34·00	34·40	276 20 10	53 22 50	0	..	A.	5·495	0 50 22	5·450	0 49 34
„ 20	11 21	33·87	34·25	276 19 45	53 22 55	0	..	G. S. J.	5·455	0 49 53		
„ 23	11 25	34·02	34·37	276 19 45	53 23 5	0	..	A.	5·455	0 49 46		
„ 25	11 30	33·87	34·40	276 19 15	53 23 0	0	..	G. S. J.	5·390	0 49 10		
„ 27	11 34	33·95	34·45	276 18 50	53 23 10	0	..	A.	5·380	0 48 36		
„ 30	11 33	34·00	34·22	276 18 35	53 22 55	0	..	G. S. J.	5·330	0 48 52		
MAY 2	11 34	33·92	34·30	276 18 35	53 22 50	0	..	A.	5·382	0 48 48		
„ 4	10 35	34·07	33·95	276 19 10	53 23 5	0	..	G. S. J.	5·400	0 49 37		
„ 7	11 32	34·07	33·85	276 18 30	53 23 10	0	..	A.	5·365	0 48 58		
„ 9	12 6	33·94	34·27	276 19 55	53 23 10	0	..	G. S. J.	5·430	0 49 52		
„ 11	12 2	33·87	34·37	276 19 20	53 23 0	0	..	A.	5·372	0 49 16	5·380	0 49 13
„ 13	11 43	34·02	34·35	276 20 0	53 23 10	0	..	G. S. J.	5·442	0 49 57		
„ 16	13 23	34·12	34·05	276 18 35	53 23 0	0	..	G. S. J.	5·417	0 49 3		
„ 23	13 10	33·82	34·15	276 17 35	53 23 10	0	..	G. S. J.	5·177	0 47 32		
„ 30	14 21	33·97	34·05	276 19 30	53 23 0	0	..	G. S. J.	5·437	0 49 50		

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

1912. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Mean Readings. Collimator Magnet. Scale apparently Inverted.	Mean Readings. Horizontal Circle with Telescope pointed to Scale of Collimator Magnet.	Mean Readings. Horizontal Circle with Telescope pointed to Kennery Light House.	Torsion. Mean.	Torsion. Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	Monthly Mean. *Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JUNE 6	13 51	33·92	34·45	276 18 10	53 23 10	0	..	G. S. J.	5·207	0 47 55	5·294	0 48 33
,, 13	12 43	34·02	34·12	276 18 30	53 23 5	0	..	G. S. J.	5·275	0 48 44		
,, 20	14 22	†33·97	35·05	276 19 0	53 23 0	0	..	G. S. J.	5·290	0 48 23		
,, 27	14 22	33·90	35·22	276 20 5	53 23 5	0	..	G. S. J.	5·405	0 49 9		
JULY 4	13 38	33·85	35·57	276 18 50	53 22 55	0	..	G. S. J.	5·300	0 47 41	5·334	0 48 0
,, 11	13 8	34·00	35·32	276 18 20	53 22 10	0	..	G. S. J.	5·337	0 48 19		
,, 18	12 11	33·95	35·37	276 18 45	53 23 10	0	..	G. S. J.	5·302	0 47 39		
,, 25	13 11	33·95	35·75	276 19 45	53 23 5	0	..	G. S. J.	5·398	0 48 22		
AUG. 1	13 41	34·00	35·15	276 19 45	53 22 45	0	..	G. S. J.	5·492	0 49 20	5·409	0 48 30
,, 8	14 23	33·97	35·22	276 19 10	53 23 15	0	..	G. S. J.	5·397	0 48 9		
,, 15	12 16	33·92	35·17	276 19 0	53 22 50	0	..	G. S. J.	5·405	0 48 24		
,, 22	13 46	34·02	35·32	276 19 25	53 23 0	0	..	G. S. J.	5·400	0 48 36		
,, 29	14 27	33·95	35·20	276 19 0	53 23 15	0	..	G. S. J.	5·350	0 47 59		
SEP 6	14 2	34·07	35·00	276 20 15	53 23 15	0	..	G. S. J.	5·490	0 49 32	5·423	0 48 39
,, 12	13 51	34·05	35·35	276 19 15	53 23 30	0	..	G. S. J.	5·402	0 47 56		
,, 19	13 44	34·02	35·12	276 19 25	53 23 20	0	..	G. S. J.	5·407	0 48 27		
,, 26	13 51	33·95	35·40	276 19 50	53 23 10	0	..	G. S. J.	5·393	0 48 42		
OCT. 3	13 39	34·15	34·87	276 19 0	53 23 20	0	..	G. S. J.	5·410	0 48 24	5·421	0 48 43
,, 10	12 55	33·95	35·10	276 19 5	53 23 15	0	..	G. S. J.	5·362	0 48 10		
,, 18	12 39	34·02	35·15	276 19 20	53 23 10	0	..	G. S. J.	5·408	0 48 31		
,, 24	13 19	34·00	35·12	276 19 25	53 22 50	0	..	G. S. J.	5·428	0 48 56		
,, 31	13 27	34·07	35·05	276 20 5	53 23 0	0	..	G. S. J.	5·498	0 49 34		
NOV. 7	13 51	33·75	35·67	276 22 12	53 23 0	0	..	G. S. J.	5·655	0 50 53	5·548	0 49 34
,, 14	14 11	33·95	35·37	276 20 15	53 23 5	0	..	G. S. J.	5·520	0 49 14		
,, 21	15 38	34·00	35·32	276 19 55	53 23 0	0	..	G. S. J.	5·485	0 49 4		
,, 28	14 14	34·00	35·47	276 20 15	53 23 10	0	..	G. S. J.	5·532	0 49 6		
DEC. 5	13 41	33·92	35·17	276 21 0	53 23 10	0	..	G. S. J.	5·602	0 50 4	5·589	0 49 30
,, 12	13 11	34·00	35·60	276 20 50	53 23 0	0	..	G. S. J.	5·622	0 49 43		
,, 19	13 9	33·92	35·22	276 19 40	53 23 0	0	..	G. S. J.	5·517	0 48 51		
,, 26	13 50	34·02	34·95	276 19 50	53 23 0	0	..	G. S. J.	5·615	0 49 22		

The mean *observed Declination for the year 1912 = 0 49 19

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

† Change in the magnet conditions was noted on the 18th June due to a mishap. The magnet appears to have received some knock unknown to the observer which has altered the moment, distribution and the zero, *vide* Introduction.

Absolute Magnetical Observations, Alibag—Table IIIa.

OBSERVATIONS OF INCLINATION, 1912.

Taken with Inductor No. 41 by Schulze and Galvanometer No. 200 By Plath.

1912. Date.		Alibag Civil Time (0 to 24 hours). At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	Monthly* mean Inclination. °	′
JAN.	1	11	55	12	17	G. S. J. and A.	23	50·47	23	52·25	23	51·36		
	2	14	14	14	29	B. P and A.	23	52·66	23	53·11	23	52·88		
,,	3	11	11	11	25	B. P. and A.	23	51·51	23	51·00	23	51·25		
,,	4	13	49	14	8	G. S. J. and A.	23	53·17	23	51·62	23	52·39		
,,	5	11	51	12	10	G. S. J. and B. P.	23	51·21	23	52·97	23	52·09		
,,	6	13	58	14	20	G. S. J. and A.	23	53·78	23	54·53	23	54·15		
,,	8	11	43	12	5	B. P. and A.	23	51·64	23	50·67	23	51·15		
,,	9	14	5	14	37	G. S. J. and A.	23	50·34	23	51·43	23	50·88		
,,	10	12	22	12	40	B. P. and A.	23	52·17	23	51·64	23	51·90		
,,	11	13	54	14	17	G. S. J. and A.	23	52·11	23	53·24	23	52·67		
,,	12	11	18	11	36	B. P. and A.	23	50·20	23	49·19	23	49·69		
,,	13	14	14	14	30	G. S. J. and A.	23	52·26	23	52·87	23	52·56		
,,	15	11	52	12	16	G. S. J. and B. P.	23	51·41	23	52·22	23	51·81		
,,	16	13	58	14	30	G. S. J. and A.	23	50·63	23	51·59	23	51·11	23	51·87
,,	17	11	34	12	8	B. P. and A.	23	48·65	23	48 05	23	48·35		
,,	18	13	52	14	7	G. S. J. and A.	23	52·48	23	51·06	23	51·77		
,,	19	11	44	12	19	G. S. J. and B. P.	23	51·12	23	52·78	23	51·95		
,,	20	14	0	14	30	G. S. J. and A.	23	51·77	23	53·44	23	52·60		
,,	22	11	36	11	53	B. P. and A.	23	50·61	23	51·77	23	51·19		
,,	23	13	52	14	16	A. and G. S. J.	23	53·42	23	54·56	23	53·99		
,,	24	11	53	12	17	G. S. J. and B. P.	23	50·16	23	51·56	23	50·86		
,,	25	13	55	14	31	G. S. J. and A.	23	52·77	23	54·96	23	53·86		
,,	26	10	58	11	15	A. and B. P.	23	50·95	23	52·42	23	51·68		
,,	27	13	54	14	17	A. and G. S. J.	23	51·91	23	52·88	23	52·39		
,,	29	11	34	11	57	G. S. J. and G. P.	23	50·22	23	52·30	23	51·26		
,,	30	13	54	14	26	G. S. J. and A.	23	53·13	23	53·55	23	53·34		
,,	31	11	25	11	47	A. and G. P.	23	50·95	23	51·62	23	51·28		
FEB.	1	14	3	14	22	A. and G. S. J.	23	52·52	23	53·15	23	52·83		
,,	2	11	11	11	32	A. and G. P.	23	50·76	23	51·83	23	51·29		
,,	3	13	58	14	15	A. and G. P.	23	52·80	23	53·46	23	53·13		
,,	5	11	59	12	25	A. and G. P.	23	50·67	23	51·70	23	51·18		
,,	6	14	0	14	21	A. and G. S. J.	23	52·16	23	52·27	23	52·21		
,,	7	11	37	2	5	G. S. J. and G. P.	23	49·35	23	51·50	23	50·42		
,,	8	13	58	14	30	G. S. J. and A.	23	53·31	23	52·55	23	52·93		
,,	9	11	26	11	47	A. and G. P.	23	49·91	23	50·70	23	50·30		
,,	10	14	5	14	42	A. and G. P.	23	52·26	23	53·58	23	52·92		
,,	12	11	44	12	8	G. S. J. and G. P.	23	50·10	23	53·73	23	51·91		
,,	13	13	55	14	22	G. S. J. and A.	23	53·60	23	55·09	23	54·34		
,,	14	12	36	13	6	G. S. J. and A.	23	50·92	23	52·44	23	51·68	23	52·46
,,	15	14	6	14	27	A. and G. S. J.	23	52·56	23	53·25	23	52·90		
,,	16	12	19	12	35	A. and G. P.	23	51·87	23	50·95	23	51·41		
,,	17	13	53	14	32	G. S. J. and A.	23	52·17	23	53·69	23	52·93		
,,	19	11	35	11	50	A. and G. P.	23	51·07	23	51·63	23	51·35		
,,	20	13	51	14	13	A. and G. S. J.	23	53·45	23	54·19	23	53·82		
,,	21	11	40	12	24	G. S. J. and G. P.	23	50·84	23	54·12	23	52·48		
,,	22	13	57	14	21	G. S. J. and A.	23	52·40	23	55·71	23	54·05		
,,	23	11	34	11	53	A. and G. P.	23	49·41	23	50·73	23	50·07		
,,	24	13	51	14	9	A. and G. S. J.	23	52·86	23	52·55	23	52·70		
,,	26	12	0	12	22	G. S. J. and G. P.	23	52·43	23	54·89	23	53·66		
,,	27	13	54	14	25	G. S. J. and A.	23	52·49	23	56·94	23	54·71		
,,	28	12	3	12	19	A. and G. P.	23	52·93	23	52·50	23	52·71		
,,	29	13	56	14	11	A. and G. S. J.	23	54·45	23	52·91	23	53·68		
MARCH	1	11	44	12	22	G. P. and G. S. J.	23	52·88	23	53·46	23	53·17		
,,	2	14	14	14	27	A. and G. P.	23	52·56	23	52·13	23	52·34		
,,	4	11	44	12	1	A. and G. P.	23	50·53	23	50·41	23	50·47		
,,	5	13	49	14	10	A. and G. S. J.	23	51·74	23	52·11	23	51·92		
,,	6	11	54	12	27	G. S. J. and G. P.	23	50·64	23	53·89	23	52·26		
,,	7	14	6	14	31	G. S. J. and A.	23	53·66	23	53·10	23	53·38		
,,	8	11	43	12	0	A. and G. P.	23	51·85	23	51·51	23	51·68		
,,	9	13	53	14	10	A. and G. S. J.	23	54·13	23	54·63	23	54·38		
,,	11	11	52	12	14	G. S. J. and G. P.	23	52·63	23	53·79	23	53·21		
,,	12	14	26	15	0	G. S. J. and A.	23	53·07	23	54·64	23	53·85		
,,	13	11	43	12	0	A. and G. P.	23	50·78	23	51·42	23	51·10		
,,	14	14	28	14	46	A. and G. S. J.	23	52·95	23	51·79	23	52·37		
,,	15	10	57	11	12	A. and G. P.	23	51·45	23	50·92	23	51·18		
,,	16	11	8	11	29	G. S. J. and A.	23	50·02	23	52·35	23	51·18	23	52·68
,,	18	14	3	14	19	A. and G. P.	23	52·59	23	53·53	23	53·06		
,,	19	12	51	13	11	A. and G. S. J.	23	51·53	23	51·79	23	51·66		
,,	20	14	9	14	31	G. S. J. and G. P.	23	53·49	23	53·28	23	53·38		
,,	21	11	37	12	5	G. S. J. and A.	23	50·27	23	53·44	23	51·85		
,,	22	11	25	11	38	A. and G. P.	23	53·37	23	52·55	23	52·96		
,,	23	13	51	14	8	A. and G. S. J.	23	53·86	23	54·37	23	54·11		
,,	25	11	35	11	58	G. S. J. and G. P.	23	51·01	23	53·63	23	52·32		
,,	26	13	55	14	16	G. S. J. and A.	23	52·01	23	54·41	23	53·21		
,,	27	14	22	14	45	G. S. J. and G. P.	23	53·09	23	55·35	23	54·22		
,,	28	14	12	14	34	A. and G. S. J.	23	54·04	23	53·41	23	53·72		
,,	29	11	17	11	37	B. P. and G. S. J.	23	51·77	23	52·85	23	52·31		
,,	30	13	56	14	18	G. S. J. and A.	23	53·74	23	55·14	23	54·44		

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1912. Date.		Alibag Civil Time (0 to 24 hours). At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	Monthly mean Inclination. °	′
April	1	11	27	11	53	A. and B. P.	23	49·57	23	51·72	23	50·64		
,,	2	13	51	14	10	A. and G. S. J.	23	53·45	23	53·18	23	53·31		
,,	3	11	45	2	6	G. S. J. and B. P.	23	52·21	23	53·94	23	53·07		
,,	4	13	52	14	15	G. S. J. and A.	23	52·85	23	54·66	23	53·75		
,,	5	11	20	11	38	A. and G. S. J.	23	51·06	23	51·08	23	51·07		
,,	6	11	53	12	9	G. S. J. and B. P.	23	51·95	23	53·32	23	52·63		
,,	8	11	43	12	3	G. S. J. and B. P.	23	52·63	23	52·90	23	52·76		
,,	9	14	11	14	35	G. S. J. and A.	23	53·38	23	54·19	23	53·78		
,,	10	11	44	12	3	A. and B. P.	23	51·23	23	52·20	23	51·71		
,,	11	15	23	15	45	A. and G. S. J.	23	53·38	23	53·30	23	53·34		
,,	12	11	36	11	49	B. P. and G. S. J.	23	52·50	23	52·90	23	52·70		
,,	13	3	58	14	25	G. S. J. and A.	23	52·37	23	54·80	23	53·58		
,,	15	14	51	15	17	G. S. J. and A.	23	54· 2	23	54·42	23	54·42	23	53·34
,,	16	13	1	13	18	A. and G. S. J.	23	55·09	23	56·48	23	55·7		
,,	17	14	2	14	34	G. S. J. and B. P.	23	53·83	23	54·18	23	54·00		
,,	18	11	39	12	4	G. S. J. and A.	23	51·94	23	53·49	23	52·71		
,,	19	11	37	11	58	B. P and A.	23	52·16	23	54·39	23	53·27		
,,	20	13	54	14	11	A. and G. S. J.	23	53·22	23	55·12	23	54·17		
,,	22	11	43	12	4	G. S. J. and B. P.	23	52·75	23	53·76	23	53·25		
,,	23	13	55	14	19	G. S. J. and A.	23	53·90	23	55·79	23	54·84		
,,	24	11	37	11	57	A. and B. P.	23	53·05	23	52·90	23	52·97		
,,	25	13	55	14	9	A. and G. S. J.	23	54·39	23	54·11	23	54·25		
,,	26	11	51	12	6	B. P. and G. S. J.	23	53·50	23	53·62	23	53·56		
,,	27	13	55	14	17	G. S. J. and A.	23	54·53	23	55·20	23	54·86		
,,	9	11	47	12	22	G. S. J. and B. P.	23	51·24	23	51·97	23	51·60		
,,	30	14	6	14	22	G. S. J. and A.	23	54·60	23	55·09	23	54·84		
May	1	12	34	12	54	A. and G. S. J.	23	51·19	23	51·92	23	51·55		
,,	2	14	15	14	39	G. S. J. and A.	23	53·33	23	54·41	23	53·87		
,,	3	11	7	11	22	B. P. and A.	23	53·70	23	53·08	23	53·39		
,,	4	13	8	14	27	A. and G. S. J.	23	53·27	23	53·94	23	53·60		
,,	6	12	39	12	59	G. S. J. and A.	23	53·83	23	55·67	23	54·75		
,,	7	13	50	14	12	G. S. J. and A.	23	53·78	23	54·39	23	54·08		
,,	9	14	42	15	7	A. and G. S. J.	23	54·16	23	53·63	23	53·89		
,,	10	12	53	13	15	B. P. and G. S. J.	23	55·27	23	55·15	23	55·21		
,,	11	14	39	15	12	G. S. J. and A.	23	54·65	23	56·87	23	55·76		
,,	13	14	44	15	11	A. and G. S. J.	23	57·58	23	59·08	23	58·33		
,,	14	13	7	13	22	A. and G. S. J.	23	54·55	23	55·42	23	54·98		
,,	15	15	34	16	1	G. S. J. and A.	23	57·03	23	56·79	23	56·91		
,,	17	11	54	12	13	B. P. and G. S. J	23	53·39	23	54·15	23	53·77	23	54·26
,,	18	11	48	12	18	G. S. J. and B. P.	23	54·14	23	54·54	23	54·34		
,,	20	11	24	11	50	B. P. and G. S. J	23	54·56	23	53·74	23	54·15		
,,	21	13	8	13	40	G. S. J. and B. P	23	54·97	23	55·87	23	55·42		
,,	22	11	12	11	46	B. P. and G. S. J.	23	52·81	23	52·47	23	52·64		
,,	23	11	35	11	59	G. S. J. and B. P.	23	52·51	23	52·83	23	52·67		
,,	24	14	32	15	8	B. P. and G. S. J.	23	55·47	23	54·93	23	55·20		
,,	25	12	11	12	46	G. S. J. and B. P.	23	54·07	23	53·32	23	53·69		
,,	27	11	4	11	29	B. P. and G. S. J.	23	52·89	23	52·72	23	52·80		
,,	28	12	16	12	57	G. S. J. and B. P.	23	54·40	23	54·04	23	54·22		
,,	29	12	8	12	47	B. P. and G. S. J.	23	54·26	23	55·34	23	54·80		
,,	30	12	8	12	45	G. S. J. and B. P.	23	53·11	23	53·91	23	53·51		
,,	31	11	46	12	12	B. P. and G. S. J.	23	53·21	23	52·82	23	53·01		
June	1	11	29	12	11	G. S. J. and B. P.	23	53·50	23	54·44	23	53·97		
,,	3	11	31	12	0	B. P. and G. S. J.	23	54·82	23	54·32	23	54·57		
,,	4	11	48	12	17	G. S. J. and B. P.	23	52·75	23	53·49	23	53·12		
,,	5	11	30	11	56	B. P. and G. S. J.	23	53·69	23	53·79	23	53·74		
,,	6	11	51	12	22	G. S. J. and B. P.	23	52·26	23	53·44	23	52·85		
,,	7	11	53	12	17	B. P. and G. S. J.	23	53·55	23	53·98	23	53·76		
,,	8	12	3	12	38	G. S. J. and B. P.	23	52·99	23	53·43	23	53·21		
,,	10	10	49	11	20	B. P. and G. S. J.	23	54·61	23	54·06	23	54·33		
,,	11	12	52	13	26	G. S. J. and B. P.	23	54·01	23	54·62	23	54·31		
,,	12	10	48	11	22	B. P. and G. S. J.	23	54·11	23	54·86	23	54·48		
,,	13	22	37	23	16	G. S. J. and B. P.	23	55·52	23	56·00	23	55·76		
,,	14	12	49	13	18	B. P. and G. S. J.	23	54·09	23	54·63	23	54·36		
,,	15	11	46	12	24	G. S. J. and B. P.	23	53·28	23	54·59	23	53·93	23	53·39
,,	17	11	37	12	3	B. P. and G. S. J.	23	52·60	23	53·25	23	52·92		
,,	18	12	6	12	59	G. S. J. and B. P.	23	52·15	23	52·50	23	52·32		
,,	19	11	32	12	9	B. P. and G. S. J.	23	51·57	23	50·57	23	51·07		
,,	20	12	19	12	55	G. S. J. and B. P.	23	52·66	23	52·16	23	52·41		
,,	21	12	16	12	56	B. P. and G. S. J.	23	53·66	23	54·09	23	53·87		
,,	22	11	44	12	18	G. S. J. and B. P.	23	52·28	23	53·06	23	52·67		
,,	24	11	37	12	8	B. P. and G. S. J.	23	53·25	23	54·26	23	53·75		
,,	25	11	44	12	30	G. S. J. and B. P.	23	53·55	23	52·48	23	53·01		
,,	26	11	43	12	9	B. P. and G. S. J.	23	52·50	23	52·69	23	52·59		
,,	27	12	25	13	8	G. S. J. and B. P.	23	51·00	23	50·47	23	50·73		
,,	28	11	20	11	52	B. P. and G. S. J.	23	51·02	23	54·14	23	52·58		
,,	29	11	46	12	21	G. S. J. and B. P.	23	54·55	23	54·23	23	54·39		

The temporary wooden pillar on which the Inductor was mounted, to the instability of which the somewhat large differences occasionally noted in previous years in the results for face east and face west, were in the main due, was removed in the month of May and the Inductor and the Galvanometer were permanently mounted on stone pillars fixed on beams isolated from the floor of the observration room.

1912. Date.		Alibag Civil Time (0 to 24 hours). At commencement.		At conclusion.		Observers.	Face of Circle. East.		West.		Mean Inclination.		Monthly mean Inclination.	
		H.	m.	H.	m.		°	′	°	′	°	′	°	′
JULY	1	11	10	11	37	B. P. and G. S. J.	23	54·59	23	54·21	23	54·40		
,,	2	12	35	12	59	G. S. J. and B. P.	23	52·89	23	52·79	23	52·84		
,,	3	11	25	11	51	B. P. and G. S. J.	23	52·16	23	51·91	23	52·03		
,,	4	11	36	12	27	G. S. J. and B. P.	23	52·75	23	52·47	23	52·61		
,,	5	11	38	12	7	B. P. and G. S. J.	23	53·43	23	53·66	23	53·54		
,,	6	11	48	12	11	G. S. J. and B. P.	23	53·25	23	53·40	23	53·32		
,,	8	12	11	12	54	G. S. J.	23	53·96	23	54·82	23	54·39		
,,	9	11	13	11	56	G. S. J. and B. P.	23	56·03	23	55·09	23	55·56		
,,	10	11	22	11	58	B. P. and G. S. J.	23	53·28	23	53·85	23	53·56		
,,	11	11	22	11	51	G. S. J. and B. P.	23	53·25	23	53·55	23	53·40		
,,	12	11	16	11	48	B. P. and G. S. J.	23	54·15	23	54·26	23	54·20		
,,	13	12	16	12	45	G. S. J. and B. P.	23	54·52	23	54·91	24	54·71		
,,	15	11	6	11	32	B. P. and G. S. J.	23	54·29	23	53·90	23	54·09		
,,	16	13	1	13	29	G. S. J. and B. P.	23	55·23	23	54·34	23	54·78		
,,	17	11	7	11	29	B. P. and G. S. J.	23	53·52	23	53·84	23	53 68		
,,	18	22	27	23	13	G. S. J. and B. P.	23	56·35	23	56·21	23	56·28	23	54·10
,,	19	11	32	12	10	B. P. and J. S. J.	23	54·36	23	53·70	23	54·03		
,,	20	11	42	12	15	G. S. J. and B. P.	23	55·64	23	55·25	23	55·44		
,,	22	11	34	12	8	B. P. and G. S. J.	23	54·39	23	54·75	23	54·57		
,,	23	11	30	12	25	G. S. J. and B. P.	23	54·76	23	53·63	23	54·19		
,,	24	11	17	11	44	B. P. and G. S. J.	23	54·27	23	53·21	23	53·74		
,,	25	11	15	11	48	G. S. J. and B. P.	23	54·36	23	53·79	23	54·07		
,,	26	11	10	11	36	B. P. and G. S. J.	23	54·66	23	53·73	23	54·19		
,,	27	11	53	12	15	G. S. J. and B. P.	23	55·59	23	54·64	23	55·11		
,,	29	11	29	11	57	B. P. and G. S. J.	23	53·69	23	53·71	23	53·70		
,,	30	11	31	12	4	G. S. J. and B. P.	23	54·87	23	54·75	23	54·81		
,,	31	11	3	11	38	B. P. and G. S. J.	23	53·80	23	52·89	23	53·34		
AUG.	1	11	53	12	24	G. S. J. and B. P.	23	55·39	23	55·62	23	56·50		
,,	2	11	11	11	43	B. P. and G. S. J.	23	52·56	23	52·35	23	52·45		
,,	3	11	44	12	18	G. S. J. and B. P.	23	55·15	23	54·46	23	54·80		
,,	5	11	33	12	12	B. P. and G. S. J.	23	54·69	23	54·52	23	54·60		
,,	6	11	16	11	46	G. S. J. and B. P.	23	55·55	23	57·14	23	56·34		
,,	7	11	15	11	49	B. P. and G. S. J.	23	55·49	23	55·57	23	55·53		
,,	8	11	55	12	29	G. S. J. and B. P.	23	55·99	23	55·84	23	55·91		
,,	9	11	10	11	39	B. P. and G. S. J.	23	54·78	23	55·32	23	55·05		
,,	10	11	34	12	3	G. S. J. and B. P.	23	55·77	23	55·81	23	55·79		
,,	12	11	16	11	44	B. P. and G. S. J.	23	55·49	23	56·49	23	55·99		
,,	13	13	3	13	39	G. S. J. and B. P.	23	55·00	23	55·92	23	55·46		
,,	14	11	6	11	34	B. P. and G. S. J.	23	54·48	23	54·93	23	54·70		
,,	16	12	10	12	34	B. P. and G. S. J.	23	55·68	23	55·76	23	55·72		
,,	17	12	16	12	46	G. S. J. and B. P.	23	55·91	23	56·10	23	56·00	23	55·32
,,	19	11	8	11	35	B. P. and G. S. J.	23	56·23	23	55·80	23	56·01		
,,	20	11	34	12	5	G. S. J. and B. P.	23	57·14	23	56·60	23	56·87		
,,	21	11	18	11	47	B. P. and G. S. J.	23	56·17	23	56·33	23	56·25		
,,	22	11	25	11	50	G. S. J. and B. P.	23	55·32	23	55·49	23	55·40		
,,	23	11	23	11	49	B. P. and G. S. J.	23	55·34	23	55·88	23	55·61		
,,	24	11	48	12	22	G. S. J. and B. P.	23	55·58	23	55·55	23	55·56		
,,	26	11	29	11	54	B. P. and G. S. J.	23	56·34	23	56·26	23	56·30		
,,	28	11	16	11	45	B. P. and G. S. J.	23	53·74	23	54·43	23	54·08		
,,	29	11	49	12	18	G. S. J. and B. P.	23	55·37	23	55·90	23	55·63		
,,	30	11	4	11	26	B. P. and G. S. J.	23	54·07	23	54·85	23	54·46		
,,	31	11	37	12	9	G. S. J. and B. P.	23	52·58	23	52·94	23	52·76		
SEPT.	2	11	10	11	34	B. P. and G. S. J.	23	54·20	23	55·41	23	54·80		
,,	3	13	59	14	40	G. S. J. and B. P.	23	56·37	23	56·99	23	56·68		
,,	5	12	4	12	34	G. S. J. and B. P.	23	55·69	23	56·35	23	56·02		
,,	6	12	27	12	58	B. P. and G. S. J.	23	53·11	23	53·93	23	53·52		
,,	7	11	44	12	13	G. S. J. and B. P.	23	56·34	23	56·56	23	56·45		
,,	9	11	22	11	55	B. P. and G. S. J.	23	54·83	23	55·72	23	55·27		
,,	10	12	57	13	34	G. S. J. and B. P.	23	57·80	23	58·10	23	57·95		
,,	11	11	16	11	51	B. P. and G. S. J.	23	54·84	23	55·67	23	55·25		
,,	12	22	53	23	33	G. S. J. and B. P.	23	57·89	23	57·80	23	57·84		
,,	13	12	0	12	27	B. P. and G. S. J.	23	56·10	23	56·20	23	56·15		
,,	16	11	1	11	30	B. P. and G. S. J.	23	56·53	23	56·55	23	56·54		
,,	17	12	1	12	28	G. S. J. and B. P.	23	54·37	23	54·48	23	54·42	23	56·09
,,	18	11	5	11	48	B. P. and G. S. J.	23	56·26	23	56·67	23	56·46		
,,	19	11	43	12	15	G. S. J. and B. P.	23	56·19	23	56·75	23	56·47		
,,	20	10	38	11	7	B. P. and G. S. J.	23	55·88	23	55·73	23	55·80		
,,	21	11	44	12	12	G. S. J. and B. P.	23	54·86	23	55·63	23	55·24		
,,	23	11	2	11	31	B. P. and G. S. J.	23	54·98	23	55·68	23	55·33		
,,	24	11	55	12	28	G. S. J. and B. P.	23	59·69	24	0·70	24	0·19		
,,	25	11	6	11	35	B. P. and G. S. J.	23	55·13	23	55·00	23	55·06		
,,	26	11	41	12	11	G. S. J. and B. P.	23	54·71	23	54·79	23	54·75		
,,	27	11	5	11	37	B. P. and G. S. J.	23	55·73	23	56·31	23	56·02		
,,	28	11	51	12	25	G. S. J. and B. P.	23	56·50	23	56·60	23	56·55		
,,	30	12	43	13	2	B. P. and G. S. J.	23	57·49	23	57·06	23	57·27		

1912. Date.		Alibag Civil Time (0 to 24 hours). At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	Monthly mean Inclination. °	′
Oct.	1	11	50	12	21	G. S. J. and B. P.	23	57·60	23	57·49	23	57·54		
,,	2	12	26	12	54	G. S. J.	23	57·50	23	57·56	23	57·53		
,,	3	11	51	12	26	G. S. J. and B. P.	23	56·35	23	56·52	23	56·43		
,,	4	11	34	12	4	B. P. and G. S. J.	23	56·25	23	55·67	23	55·96		
,,	5	12	31	13	7	G. S. J. and B. P.	23	56·69	23	57·11	23	56·90		
,,	7	11	6	11	31	B. P. and G. S. J.	23	56·85	23	56·62	23	56·73		
,,	8	13	10	13	36	G. S. J. and B. P.	23	57·21	23	57·30	23	57·25		
,,	9	11	18	12	0	B. P. and G. S. J.	23	54·92	23	55·81	23	55·36		
,,	10	22	46	23	41	G. S. J. and B. P.	23	59·01	23	58·94	23	58·97		
,,	11	14	31	15	6	B. P. and G. S. J.	23	58·16	23	57·97	23	58·06		
,,	12	11	44	12	12	G. S. J. and B. P.	23	55·80	23	55·14	23	55·47		
,,	14	11	11	11	34	B. P. and G. S. J.	23	56·88	23	55·74	23	56·31		
,,	15	11	31	12	10	G. S. J. and B. P.	23	55·64	23	56·37	23	56·00	23	56·87
,,	16	11	25	11	46	B. P. and G. S. J.	23	56·98	23	57·48	23	57·23		
,,	17	11	20	11	47	B. P.	23	55·12	23	55·73	23	55·42		
,,	18	11	28	11	51	B. P. and G. S. J.	23	57·06	23	56·91	23	56·98		
,,	19	11	29	11	55	G. S. J. and B. P.	23	58·09	23	57·45	23	57·77		
,,	22	11	38	12	4	G. S. J. and B. P.	23	56·66	23	56·42	23	56·54		
,,	23	11	20	11	50	B. P. and G. S. J.	23	57·19	23	57·62	23	57·40		
,,	24	11	41	12	6	G. S. J. and B. P.	23	57·75	23	57·57	23	57·66		
,,	25	11	18	11	39	B. P. and G. S. J.	23	55·79	23	56·46	23	56·12		
,,	26	11	34	12	2	G. S. J. and B. P.	23	57·43	23	57·21	23	57·32		
,,	28	11	6	11	40	B. P. and G. S. J.	23	56·45	23	56·77	23	56·61		
,,	29	11	36	12	1	G. S. J. and B. P.	23	57·98	23	56·78	23	57·38		
,,	30	11	5	11	35	B. P. and G. S. J.	23	55·55	23	56·01	23	55·78		
,,	31	11	44	12	16	G. S. J. and B. P.	23	57·79	23	58·20	23	57·99		
Nov.	1	11	35	12	50	B. P. and G. S. J.	23	57·28	23	58·07	23	57·67		
,,	2	11	43	12	8	G. S. J. and B. P.	23	59·03	23	58·75	23	58·89		
,,	4	11	24	11	53	B. P. and G. S. J.	23	56·58	23	57·84	23	57·21		
,,	5	12	16	12	47	G. S. J. and B. P.	23	59·18	23	59·22	23	59·20		
,,	6	11	30	11	55	B. P. and G. S. J.	23	57·47	23	58·23	23	57·85		
,,	7	11	59	12	28	G. S. J. and B. P.	23	59·08	23	58·46	23	58·77		
,,	11	11	9	11	37	B. P. and G. S. J.	23	59·26	23	59·32	23	59·29		
,,	12	11	44	12	20	G. S. J. and B. P.	23	59·88	23	59·76	23	59·82		
,,	13	11	1	11	27	B. P. and G. S. J.	23	56·98	23	57·62	23	57·30		
,,	14	11	48	12	13	G. S. J. and B. P.	23	58·65	23	58·57	23	58·61		
,,	15	12	21	12	46	B. P. and G. S. J.	24	0·74	24	0·33	24	0·53		
,,	16	11	41	12	12	G. S. J. and B. P.	23	59·10	23	58·76	23	58·93		
,,	18	11	23	11	52	B. P. and G. S. J.	23	57·11	23	57·51	23	57·31	23	58·73
,,	19	11	43	12	15	G. S. J. and B. P.	23	58·89	23	59·20	23	59·04		
,,	20	11	7	11	33	B. P. and G. S. J.	23	57·90	23	58·20	23	58·05		
,,	21	13	36	14	18	G. S. J. and B. P.	23	58·60	23	57·96	23	58·28		
,,	22	11	52	12	13	B. P. and G. S. J.	23	59·45	23	59·58	23	59·51		
,,	23	12	0	12	35	G. S. J. and B. P.	23	58·44	23	59·30	23	58·87		
,,	25	11	17	11	45	B. P. and G. S. J.	23	59·02	23	58·86	23	58·94		
,,	26	11	53	12	22	G. S. J. and B. P.	23	59·04	23	58·89	23	58·96		
,,	27	11	36	12	1	B. P. and G. S. J.	23	59·28	23	59·08	23	59·18		
,,	28	13	5	13	30	G. S. J. and B. P.	23	59·38	23	59·12	23	59·25		
,,	29	12	3	12	34	B. P. and G. S. J.	23	58·23	23	59·08	23	58·65		
,,	30	11	12	11	54	G. S. J. and B. P.	23	58·99	23	59·84	23	59·41		
Dec.	2	11	2	11	32	B. P.	23	58·88	23	59·51	23	59·19		
,,	3	11	50	12	20	B. P. and G. S. J.	23	59·95	24	0·07	24	0·01		
,,	4	11	48	12	12	B. P. and G. S. J.	23	59·44	24	0·39	23	59·91		
,,	5	11	52	12	19	G. S. J. and B. P.	23	59·59	24	0·16	23	59·87		
,,	6	11	16	11	39	B. P. and G. S. J.	23	57·99	23	58·65	23	58·32		
,,	7	12	28	12	59	G. S. J. and B. P.	23	58·93	23	59·73	23	59·33		
,,	9	11	20	11	48	B. P. and G. S. J.	24	0·17	24	0·11	24	0·14		
,,	10	11	48	12	31	G. S. J. and B. P.	23	58·87	23	59·41	23	59·14		
,,	11	11	36	2	2	B. P. and G. S. J.	23	58·55	23	59·15	23	58·85		
,,	12	12	2	12	43	G. S. J. and B. P.	24	0·18	24	0·54	24	0·36		
,,	13	11	35	12	33	B. P. and G. S. J.	23	58·26	23	58·40	23	58·33		
,,	14	13	40	14	26	G. S. J. and B. P.	23	0·47	24	0·35	24	0·41		
,,	16	10	31	11	2	B. P. and G. S. J.	23	59·79	23	59·73	23	59·76	23	59·27
,,	17	11	38	12	16	G. S. J. and B. P.	23	58·37	23	58·97	23	58·67		
,,	18	11	8	11	46	B. P. and G. S. J.	24	1·16	24	1·35	24	1·25		
,,	19	11	46	12	28	G. S. J. and B. P.	23	58·77	23	59·05	23	58·91		
,,	20	12	12	12	38	B. P. and G. S. J.	23	57·99	23	58·40	23	58·19		
,,	21	11	49	12	23	G. S. J. and B. P.	23	58·62	23	59·00	23	58·81		
,,	23	11	5	11	31	B. P. and G. S. J.	23	58·50	23	58·69	23	58·59		
,,	24	11	45	12	31	G. S. J. and B. P.	24	0·04	24	0·73	24	0·38		
,,	26	11	47	12	18	G. S. J. and B. P.	23	57·61	23	57·65	23	57·63		
,,	27	11	48	12	15	B. P. and G. S. J.	23	57·75	23	58·73	23	58·24		
,,	28	12	16	12	49	G. S. J. and B. P.	23	59·88	23	59·53	23	59·70		
,,	30	12	9	12	43	B. P. and G. S. J.	23	59·03	23	59·53	23	59·28		
,,	31	12	25	12	56	G. S. J. and B. P.	23	58·50	23	58·63	23	58·56		

The mean *observed Inclination for the year 1912 = 23° 54′·87

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table IIIb.

OBSERVATIONS OF INCLINATION, 1912.

Taken with Dip Circle No. 160 (Cambridge Scientific Instrument Co.) and two 3½ inch Needles Nos. 1/05 and 2/05 by Dover Charlton.

1912. Date.	Alibag Civil Time (0 to 24 hours). At commencement.		At conclusion.		Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.		A. West.		B. Face of Circle. East.		B. West.		Mean Dip.	Monthly Mean for each Needle.	*Monthly Mean.
	H.	m.	H.	m.			°	′	°	′	°	′	°	′	° ′	′	° ′
JAN. 3	12	10	13	0	A.	1/05	23	44·2	24	0·4	23	43·5	23	57·1	23 51·3		
,, 4	14	16	14	57	A.	2/05	23	38·9	23	59·3	23	42·9	24	2·1	23 50·8		
,, 5	12	30	13	22	G. S. J.	1/05	23	44·1	23	58·2	23	45·7	23	53·2	23 50·3		
,, 6	14	38	15	25	G. S. J.	2/05	23	42·6	23	57·6	23	44·1	23	58·7	23 50·7		
,, 8	12	16	12	59	A.	1/05	23	44·9	23	54·5	23	46·0	23	56·9	23 50·6	No. 1/05	
,, 9	15	5	15	52	A.	2/05	23	40·0	23	58·1	23	45·0	23	57·5	23 50·1	23 50·9	
,, 11	14	41	15	30	G. S. J.	2/05	23	39·0	23	55·5	23	49·6	23	49·6	23 59·5		
,, 12	11	50	12	30	A.	1/05	23	44·7	23	56·0	23	43·4	23	59·2	23 50·8		
,, 13	14	40	15	20	A.	2/05	23	42·2	24	3·0	23	40·4	24	1·4	23 51·7		
,, 15	12	36	13	17	G. S. J.	1/05	23	36·1	24	5·4	23	39·6	24	4·9	23 51·5		
,, 16	14	40	15	26	G. S. J.	2/05	23	37·1	23	58·2	23	44·1	24	3·9	23 50·8		
,, 17	12	15	12	58	A.	1/05	23	46·1	23	52·5	23	48·6	23	55·4	23 50·6		
,, 18	14	13	14	54	A.	2/05	23	39·5	23	57·1	23	46·5	24	4·4	23 51·9		23 50·9
,, 19	12	50	13	31	G. S. J.	1/05	23	37·9	24	0·2	23	47·6	24	0·7	23 51·6		
,, 20	14	52	15	31	G. S. J.	2/05	23	36·4	23	57·2	23	42·5	24	6·1	23 50·5		
,, 22	12	0	12	43	A.	1/05	23	42·7	23	57·1	23	50·2	23	55·1	23 51·3		
,, 23	14	25	15	6	A.	2/05	23	39·7	23	56·9	23	45·6	24	2·7	23 51·2		
,, 24	12	32	13	19	G. S. J.	1/05	23	43·0	23	53·0	23	49·2	23	56·4	23 50·4		
,, 25	14	43	15	33	G. S. J.	2/05	23	40·2	23	55·7	23	47·1	23	57·8	23 50·2	No. 2/05	
,, 26	11	24	12	10	A.	1/05	23	43·2	23	53·2	23	52·7	23	56·5	23 51·4	23 50·9	
,, 27	14	45	15	30	A.	2/05	23	43·4	23	54·7	23	47·7	24	1·2	23 51·7		
,, 29	12	13	13	2	G. S. J.	1/05	23	43·6	23	57·1	23	46·5	24	0·2	23 51·8		
,, 30	14	45	15	31	G. S. J.	2/05	23	39·3	23	56·2	23	48·2	23	58·0	23 50·4		
,, 31	12	0	12	45	A.	1/05	23	40·1	23	52·9	23	49·1	23	55·9	23 49·5		
FEB. 1	14	42	15	28	A.	2/05	23	36·7	24	1·7	23	46·1	24	5·1	23 52·4		
,, 2	11	55	12	40	A.	1/05	23	44·0	23	53·9	23	50·7	23	56·4	23 51·2		
,, 3	14	28	15	10	A.	2/05	23	39·5	23	57·1	23	45·2	24	3·2	23 51·2		
,, 5	12	40	13	20	A.	1/05	23	46·7	23	50·0	23	56·0	23	54·2	23 51·7		
,, 6	14	35	15	18	A.	2/05	23	41·2	23	57·7	23	44·9	24	1·4	23 51·3	No. 1/05	
,, 7	12	23	13	10	G. S. J.	1/05	23	39·5	23	49·7	23	51·7	23	56·7	23 49·4	23 50·9	
,, 8	14	44	15	25	G. S. J.	2/05	23	41·9	24	1·1	23	43·9	24	3·7	23 52·6		
,, 9	11	58	12	41	A.	1/05	23	48·7	23	58·9	23	47·0	23	55·2	23 52·4		
,, 10	14	58	15	42	A.	2/05	23	41·2	23	56·5	23	42·9	24	3·7	23 51·1		
,, 12	12	28	13	12	G. S. J.	1/05	23	47·0	23	55·2	23	50·2	23	59·1	23 52·9		
,, 13	14	42	15	27	G. S. J.	2/05	23	47·7	23	52·2	23	48·2	23	58·2	23 51·6		
,, 14	13	20	13	59	A.	1/05	23	45·1	23	59·6	23	44·2	23	56·5	23 51·3		
,, 15	14	40	15	24	A.	2/05	23	39·2	23	54·3	23	50·4	24	3·6	23 51·9		23 51·3
,, 17	14	48	15	31	G. S. J.	2/05	23	37·9	24	0·6	23	41·9	24	3·1	23 50·9		
,, 19	12	5	12	50	A.	1/05	23	42·5	23	55·5	23	47·6	23	58·9	23 51·1		
,, 20	14	30	15	15	A.	2/05	23	42·5	23	55·5	23	47·5	24	0·6	23 51·5		
,, 21	12	38	13	18	G. S. J.	1/05	23	40·6	23	50·1	23	48·7	23	56·5	23 49·0		
,, 22	14	39	15	20	G. S. J.	2/05	23	37·9	23	59·2	23	44·4	24	0·6	23 50·5		
,, 23	12	10	13	0	A.	1/05	23	41·4	23	55·4	23	44·5	23	58·4	23 49·9	No. 2/05	
,, 24	14	24	15	7	A.	2/05	23	41·0	23	58·7	23	47·5	24	0·5	23 51·9	23 51·6	
,, 26	12	40	13	22	G. S. J.	1/05	23	44·3	23	57·7	23	47·0	23	57·7	23 51·7		
,, 27	14	40	15	26	G. S. J.	2/05	23	40·2	23	58·5	23	41·4	24	7·5	23 51·9		
,, 28	12	29	13	10	A.	1/05	23	43·0	23	54·5	23	44·2	23	57·7	23 49·8		
,, 29	14	25	15	8	A.	2/05	23	41·7	23	56·9	23	49·0	24	1·4	23 52·2		
MARCH 1	12	41	13	21	G. S. J.	1/05	23	40·7	23	57·2	23	47·5	23	59·0	23 51·1		
,, 4	12	15	13	0	A.	1/05	23	45·2	23	56·4	23	47·6	23	55·7	23 51·2		
,, 5	14	23	15	8	A.	2/05	23	37·2	23	54·9	23	45·5	24	3·7	23 50·3		
,, 6	12	42	13	22	G. S. J.	1/05	23	42·4	23	54·6	23	43·7	23	58·1	23 49·7		
,, 7	14	50	15	31	G. S. J.	2/05	23	35·1	23	55·0	23	45·1	24	6·5	23 50·4	No. 1/05	
,, 8	12	15	13	0	A.	1/05	23	39·7	23	59·2	23	44·1	23	58·0	23 50·2	23 50·7	
,, 9	14	27	15	10	A.	2/05	23	40·2	23	59·4	23	47·6	23	58·2	23 51·3		
,, 11	12	31	13	12	G. S. J.	1/05	23	41·9	23	55·9	23	47·4	24	0·4	23 51·4		
,, 12	15	16	15	55	G. S. J.	2/05	23	39·2	23	53·9	23	48·9	23	57·4	23 49·8		
,, 13	12	15	12	57	A.	1/05	23	41·5	23	54·2	23	44·1	24	1·4	23 50·3		
,, 14	15	0	15	42	A.	2/05	23	31·9	24	0·5	23	47·1	24	0·7	23 50·0		
,, 15	9	10	9	53	A.	1/05	23	41·1	23	59·4	23	47·6	23	55·0	23 50·8		23 50·6
,, 18	14	32	15	12	A.	1/05	23	37·7	24	2·6	23	46·7	23	57·0	23 51·0		
,, 19	11	25	12	5	A.	2/05	23	37·0	23	56·5	23	42·0	24	1·6	23 49·3		
,, 20	14	47	15	30	G. S. J.	1/05	23	41·9	23	57·1	23	48·2	24	1·5	23 52·2		
,, 21	12	23	13	7	G. S. J.	2/05	23	37·2	23	54·7	23	43·1	23	59·9	23 48·7		
,, 22	11	57	12	36	A.	1/05	23	43·8	23	50·5	23	47·7	23	55·7	23 49·4		
,, 23	14	18	14	58	A.	2/05	23	39·9	23	58·4	23	42·0	24	4·5	23 51·2	No. 2/05	
,, 25	12	16	12	55	G. S. J.	1/05	23	42·4	23	55·9	23	47·2	23	53·6	23 49·8	23 50·4	
,, 26	14	33	15	13	G. S. J.	2/05	23	41·1	23	57·4	23	44·9	24	1·5	23 51·2		
,, 28	14	45	15	26	A.	2/05	23	39·7	23	54·0	23	43·5	24	2·0	23 49·8		
,, 29	11	50	12	30	G. S. J.	1/05	23	38·5	24	0·0	23	44·9	24	3·1	23 51·6		
,, 30	14	35	15	15	G. S. J.	2/05	23	36·2	23	54·7	23	52·2	24	7·0	23 52·5		

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

1912. Date.	Alibag Civil Time (0 to 24 hours). At commencement.	At conclusion.	Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.	A. Face of Circle. West.	B. Face of Circle. East.	B. Face of Circle. West.	Mean Dip.	Monthly Mean for each Needle.	Monthly Mean.
	H. m.	H. m.			° ′	° ′	° ′	° ′	° ′	° ′	° ′
April 1	12 5	12 46	A.	1/05	23 43·5	23 54·7	23 47·0	23 56·0	23 50·3		
„ 2	14 20	15 4	A.	2/05	23 35·7	23 55·5	23 51·0	24 5·3	23 51·9		
„ 3	12 24	13 10	G. S. J.	1/05	23 39·2	23 58·9	23 44·2	23 53·4	23 48·9	No. 1/05	
„ 4	14 35	15 16	G. S. J.	2/05	23 42·9	23 57·5	23 46·4	24 2·0	23 52·2	23 52·1	
„ 8	12 18	13 6	G. S. J.	1/05	23 47·2	23 57·4	23 48·3	23 54·9	23 51·9		
„ 9	14 50	15 34	G. S. J.	2/05	23 38·5	23 51·9	23 48·1	24 3·7	23 50·5		
„ 10	12 15	12 56	A.	1/05	23 44·6	23 55·5	23 41·5	24 0·2	23 50·4		
„ 11	16 0	16 43	A.	2/05	23 40·7	23 56·7	23 49·0	24 2·0	23 52·1		
„ 12	12 14	12 56	G. S. J.	1/05	23 41·6	23 57·7	23 45·5	24 1·4	23 51·5		
„ 13	14 42	15 24	G. S. J.	2/05	23 44·9	24 1·9	23 46·4	24 3·8	23 54·2		
„ 15	15 30	16 9	A.	1/05	23 42·2	24 0·7	23 48·5	24 7·5	23 54·7		
„ 16	11 35	12 15	A.	2/05	23 40·2	23 58·2	23 46·5	24 3·0	23 52·0		23 52·3
„ 17	14 52	15 35	G. S. J.	1/05	23 43·0	24 4·6	23 48·0	24 3·1	23 54·7		
„ 18	12 25	13 11	G. S. J.	2/05	23 39·1	23 57·4	23 44·7	24 1·6	23 50·7		
„ 19	12 10	12 50	A.	1/05	23 43·5	24 4·7	23 45·7	23 58·7	23 53·1		
„ 20	14 25	15 6	A.	2/05	23 38·2	24 4·2	23 47·7	23 58·5	23 52·1		
„ 22	12 20	13 4	G. S. J.	1/05	23 45·4	24 2·4	23 48·6	23 59·6	23 54·0		
„ 23	14 36	15 16	G. S. J.	2/05	23 43·9	24 0·2	23 46·9	24 6·6	23 54·4		
„ 24	12 12	12 54	A.	1/05	23 38·0	24 1·0	23 45·2	24 2·0	23 51·5		
„ 25	14 20	15 0	A.	2/05	23 43·2	24 4·2	23 38·0	24 11·2	23 54·1		
„ 26	12 40	13 25	G. S. J.	1/05	23 45·4	23 58·1	23 49·7	24 0·0	23 53·3	No. 2/05	
„ 27	14 39	15 26	G. S. J.	2/05	23 43·7	23 59·9	23 50·9	24 2·6	23 54·3	23 52·6	
„ 29	12 50	13 30	A.	1/05	23 39·5	23 51·2	23 48·7	24 4·2	23 50·9		
„ 30	14 35	15 15	A.	2/05	23 39·5	23 59·5	23 47·7	24 2·0	23 52·2		
May 1	13 17	13 56	G. S. J.	1/05	23 44·2	23 55·3	23 50·2	24 1·6	23 52·8		
„ 2	15 15	15 58	G. S. J.	2/05	23 42·4	23 58·2	23 46·7	24 2·7	23 52·5		
„ 3	11 35	12 13	A.	1/05	23 46·2	23 54·0	23 47·2	23 58·7	23 51·5	No. 1/05	
„ 4	13 40	14 18	A.	2/05	23 40·5	23 59·0	23 47·7	24 0·7	23 52·0	23 53·4	
„ 6	13 32	14 14	G. S. J.	1/05	23 43·6	23 58·5	23 45·2	24 3·0	23 52·6		
„ 7	14 36	15 20	G. S. J.	2/05	23 43·2	23 56·8	23 47·6	24 1·7	23 52·3		
„ 9	15 27	16 9	A.	2/05	23 46·7	24 1·3	23 42·5	23 59·0	23 52·4		
„ 10	13 48	14 28	G. S. J.	1/05	23 42·2	23 57·9	23 48·9	24 2·4	23 52·8		23 52·9
„ 11	17 29	18 13	G. S. J.	2/05	23 47·7	23 56·8	23 46·9	24 0·3	23 52·9		
„ 13	15 30	16 15	A.	1/05	23 50·0	24 3·0	23 54·0	24 4·2	23 57·8		
„ 14	11 40	12 25	A.	2/05	23 41·0	23 59·2	23 41·2	24 1·7	23 50·8	No. 2/05	
„ 15	12 29	13 51	G. S. J.	1/05	23 42·5	23 56·8	23 51·7	24 0·7	23 52·9	23 52·4	
„ 18	12 57	13 43	G. S. J.	2/05	23 40·4	23 58·5	23 50·0	24 6·5	23 53·8		
„ 25	13 42	14 31	G. S. J.	1/05	23 41·0	24 0·5	23 50·0	24 1·9	23 53·3		
June 1	13 3	13 55	G. S. J.	2/05	23 48·7	23 59·9	23 48·6	24 1·2	23 54·6	No. 1/05	
„ 8	13 42	14 32	G. S. J.	1/05	23 41·5	23 59·0	23 54·1	24 4·3	23 54·7	23 54·4	
„ 15	13 16	14 2	G. S. J.	2/05	23 40·5	24 0·5	23 46·2	24 3·6	23 52·7		23 54·1
„ 22	13 3	14 9	G. S. J.	1/05	23 45·4	23 57·1	23 49·0	24 5·2	23 54·2	No. 2/05	
„ 29	13 40	14 30	G. S. J.	2/05	23 43·4	23 55·2	23 52·1	24 6·6	23 54·3	23 53·9	
July 6	13 12	14 4	G. S. J.	1/05	23 41·2	24 2·7	23 52·1	23 59·1	23 53·8	No. 1/05	
„ 13	13 41	14 27	G. S. J.	2/05	23 45·6	23 55·6	23 50·6	24 4·1	23 54·0	23 54·9	
„ 20	13 19	14 6	G. S. J.	1/05	23 48·9	23 59·6	23 50·7	24 4·7	23 56·0	No. 2/05	23 54·4
„ 27	13 41	14 24	G. S. J.	2/05	23 40·7	23 56·9	23 46·6	24 11·4	23 53·9	23 53·9	
Aug. 3	13 21	14 6	G. S. J.	1/05	23 45·8	24 5·6	23 48·3	24 6·1	23 56·4	No. 1/05	
„ 10	13 0	13 44	G. S. J.	2/05	23 43·8	23 58·5	23 55·3	24 3·9	23 55·4	23 56·6	
„ 17	13 42	14 32	G. S. J.	1/05	23 47·7	24 3·0	23 52·4	24 7·1	23 57·5		23 56·4
„ 24	13 9	14 0	G. S. J.	2/05	23 46·7	24 1·2	23 56·6	24 2·0	23 56·6	No. 2/05	
„ 31	13 6	14 2	G. S. J.	1/05	23 50·0	24 0·9	23 49·7	24 3·1	23 55·9	23 56·0	
Sept. 7	13 2	13 47	G. S. J.	2/05	23 43·9	23 59·5	23 52·4	24 13·6	23 57·3	No. 1/05	
										23 56·0	
„ 21	13 19	14 0	G. S. J.	1/05	23 43·4	24 4·2	23 50·2	24 6·2	23 56·0		23 57·6
										No. 2/05	
„ 28	13 8	13 55	G. S. J.	2/05	23 48·0	24 5·2	23 55·4	24 9·5	23 59·5	23 58·4	
Oct. 5	13 54	14 44	G. S. J.	1/05	23 46·6	24 4·9	23 52·8	24 5·1	23 57·3	No. 1/05	
„ 12	13 0	13 53	G. S. J.	2/05	23 50·7	24 6·7	23 51·5	24 8·1	23 59·2	23 57·7	
„ 19	12 42	13 22	G. S. J.	1/05	23 47·6	24 3·4	23 54·5	24 7·2	23 58·2	No. 2/05	23 58·1
„ 26	13 0	13 43	G. S. J.	2/05	23 47·4	24 2·0	23 50·0	24 10·9	23 57·6	23 58·4	

1912. Date.	Alibag Civil Time (0 to 24 hours). At commencement.	At conclusion.	Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.	A. West.	B. Face of Circle. East.	B. West.	Mean Dip.	Monthly Mean for each Needle.	*Monthly Mean.
	H. m.	H. m.			° ′	° ′	° ′	° ′	° ′	° ′	° ′
Nov. 2	12 55	13 40	G. S. J.	1/05	23 50·5	24 7·9	23 54·2	24 8·9	24 0·4	No. 1/05 23 59·6	23 58·7
,, 16	13 44	14 40	G. S. J.	2/05	23 48·1	24 1·7	23 55·5	24 6·1	23 57·8	No. 2/05 23 57·8	
,, 23	13 42	14 27	G. S. J.	1/05	23 51·9	23 59·9	24 0·1	24 3·9	23 58·9		
,, 30	12 28	13 8	G. S. J.	2/05	23 52·1	23 55·6	23 59·3	24 4·4	23 57·8		
Dec. 7	14 18	15 4	G. S. J.	1/05	23 58·5	23 57·7	23 55·6	24 10·1	24 0·5	No. 1/05 23 59·9	23 59·3
,, 14	15 18	15 59	G. S. J.	2/05	23 49·6	24 0·0	24 0·4	24 2·5	23 58·1	No. 2/05 23 58·8	
,, 21	13 20	14 1	G. S. J.	1/05	23 52·0	24 3·7	23 57·9	24 3·6	23 59·3		
,, 28	13 42	14 36	G. S. J.	2/05	23 53·5	23 58·5	23 57·7	24 8·2	23 59·5		

The Mean Dip for the year { With needle No. 1/05 = 23° 54′·8 ; With needle No. 2/05 = 23° 54′·6 }

The Mean *observed Dip for the year 1912 = 23° 54′·7

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

Absolute Magnetical Observations, Alibag—Table Ia.

Observations of Vibration and Deflection, taken with Magnetometer No. 7 (T. Cooke and Sons) for the determination of Absolute Horizontal Force.

1913.

1913. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Effect of 90° Torsion.	Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	30·0 cms.	Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	30·0 cms. ($H_{30\cdot0}$).	Difference. $H_{22\cdot5}-H_{30\cdot0}$	Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
Jan. 2	13 56	2·7072	1·54	27·7	−2·1	5·498	84·30	26 36 42	10 49 35	27·7	5·497	84·30	G. S. J.	938·14	0·36883	0·36882	+·00003	0·36883	
„ „	15 27	2·7073	1·56	27·9	„	5·407	84·30	26 36 25	10 49 32	27·9	5·455	84·30	G. S. J.	938·14	·36886	·36882	+·00004	·36884	
„ 8	12 38	2·7056	1·52	26·1	−2·0	5·812	83·82	26 37 20	10 49 50	26·3	5·652	83·82	G. S. J.	938·21	·36899	·36896	+·00003	·36897	
„ „	14 26	2·7068	1·50	27·1	„	5·441	83·87	26 37 14	10 49 46	26·8	5·478	83·87	G. S. J.	938·08	·36887	·36885	+·00002	·36886	
„ 15	13 27	2·7049	1·49	25·7	−2·0	5·956	83·27	26 37 46	10 49 59	26·0	5·685	83·27	G. S. J.	938·43	·36903	·36900	+·00003	·36901	0·368852
„ „	15 16	2·7063	1·58	26·1	„	5·238	83·30	26 38 31	10 50 18	26·0	5·308	83·30	G. S. J.	938·21	·36878	·36875	+·00003	·36876	
„ 22	13 14	2·7061	1·58	25·0	−2·3	5·407	82·90	26 38 18	10 50 10	26·0	5·422	82·90	G. S. J.	938·19	·36883	·36881	+·00002	·36882	
„ „	15 16	2·7063	1·57	26·2	„	5·235	82·90	26 38 17	10 50 12	26·2	5·305	82·90	G. S. J.	938·19	·36880	·36877	+·00003	·36878	
„ 29	14 0	2·7061	1·58	26·3	−2·3	5·407	82·65	26 38 8	10 50 7	26·3	5·350	82·65	G. S. J.	938·27	·36885	·36882	+·00003	·36883	
„ „	15 20	2·7066	1·58	26·7	„	5·314	82·67	26 37 47	10 49 57	26·5	5·338	82·67	G. S. J.	938·14	·36883	·36882	+·00001	·36882	
Feb. 5	13 32	2·7061	1·57	26·6	−2·2	5·693	82·60	26 37 20	10 49 44	26·6	5·602	82·60	G. S. J.	938·17	·36894	·36894	·00000	·36894	
„ „	15 28	2·7071	1·59	26·9	„	5·425	82·65	26 37 26	10 49 47	26·9	5·463	82·65	G. S. J.	937·99	·36878	·36878	·00000	·36878	
„ 12	12 39	2·7065	1·56	26·7	−2·2	5·703	82·80	26 37 23	10 49 54	26·4	5·473	82·80	G. S. J.	938·08	·36889	·36885	+·00004	·36887	
„ „	15 16	2·7068	1·56	27·0	„	5·241	82·80	26 37 29	10 49 51	26·9	5·242	82·80	G. S. J.	938·14	·36882	·36881	+·00001	·36881	
„ 19	13 22	2·7066	1·57	27·4	−2·0	5·490	82·87	26 37 13	10 49 52	27·7	5·088	82·87	G. S. J.	938·47	·36885	·36880	+·00005	·36882	·368821
„ „	15 2	2·7078	1·57	28·1	„	5·023	82·92	26 36 57	10 49 41	27·9	5·046	82·92	G. S. J.	938·12	·36875	·36872	+·00003	·36873	
„ 26	12 55	2·7047	1·60	25·4	−2·1	6·007	82·90	26 38 8	10 50 7	25·7	5·628	82·90	G. S. J.	938·43	·36901	·36899	+·00002	·36900	
„ „	15 21	2·7070	1·58	26·5	„	5·121	82·90	26 39 10	10 50 36	26·1	4·840	82·90	G. S. J.	938·25	·36865	·36860	+·00005	·36862	
Mar. 5	12 58	2·7063	1·58	26·7	−2·1	5·455	83·20	26 38 9	10 50 11	26·1	5·256	83·20	G. S. J.	938·27	·36887	·36882	+·00005	·36884	
„ „	15 12	2·7070	1·58	26·4	„	4·965	83·20	26 38 35	10 50 15	26·4	4·975	83·20	G. S. J.	938·12	·36866	·36865	+·00001	·36865	
„ 12	13 29	2·7056	1·57	27·1	−2·0	6·005	83·40	26 36 5	10 49 20	27·0	5·855	83·40	G. S. J.	938·23	·36914	·36911	+·00003	·36912	
„ „	15 5	2·7065	1·57	27·2	„	5·555	83·40	26 36 16	10 49 21	27·1	5·675	83·40	G. S. J.	937·99	·36899	·36899	·00000	·36899	
„ 19	13 6	2·7068	1·57	27·5	−2·2	5·215	83·65	26 37 13	10 49 45	27·5	5·057	83·65	G. S. J.	938·30	·36883	·36882	+·00001	·36882	·368882
„ „	15 24	2·7079	1·58	27·8	„	4·735	83·57	26 37 30	10 49 55	27·6	4·790	83·57	G. S. J.	938·12	·36868	·36865	+·00003	·36866	
„ 26	13 9	2·7059	1·57	27·9	−1·9	5·955	84·05	26 35 37	10 49 15	27·7	5·610	84·05	G. S. J.	938·36	·36916	·36911	+·00005	·36913	
„ „	15 29	2·7075	1·58	28·0	„	5·042	84·05	26 36 4	10 49 18	28·1	5·215	84·05	G. S. J.	938·02	·36886	·36884	+·00002	·36885	

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1913. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	Angle of Deflection of Magnet marked 7. Distance. 30·0 cms.	Angle of Deflection of Magnet marked 7. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	Values of H. From Deflection at distance. 30·0 cms. ($H_{30\cdot0}$).	Values of H. Difference. $H_{22\cdot5}-H_{30\cdot0}$	Values of H. Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
April 2	12 25	2·7069	1·57	28·0	−2·2	5·186	84·50	26 36 11	10 49 17	28·0	5·096	84·50	G. S. J.	938·21	0·36894	0·36894	·00000	0·36894	
„ „	14 58	2·7085	1·58	28·5	„	4·710	84·50	26 36 43	10 49 35	28·2	4·802	84·50	G. S. J.	937·97	·36868	·36866	+·00002	·36867	
„ 9	12 57	2·7085	1·57	29·2	−2·2	4·892	85·20	26 35 8	10 48 55	29·4	4·902	85·20	G. S. J.	937·95	·36880	·36880	·00000	·36880	
„ „	15 23	2·7093	1·58	30·3	„	4·958	85·20	26 34 26	10 48 41	30·0	4·990	85·20	G. S. J.	937·89	·36881	·36879	+·00002	·36880	
„ 16	12 56	2·7085	1·56	30·7	−2·3	5·097	86·25	26 33 36	10 48 19	30·7	4·988	86·25	G. S. J.	938·19	·36899	·36898	+·00001	·36898	
„ „	15 19	2·7096	1·57	30·6	„	4·687	86·25	26 34 15	10 48 34	30·7	4·782	86·25	G. S. J.	937·95	·36876	·36875	+·00001	·36875	0·368814
„ 23	12 47	2·7085	1·57	29·9	−2·6	4·958	87·15	26 34 44	10 48 44	29·5	4·876	87·15	G. S. J.	938·02	·36890	·36890	·00000	·36890	
„ „	14 54	2·7086	1·56	29·4	„	4·590	87·15	26 35 7	10 49 0	29·6	4·663	87·15	G. S. J.	938·06	·36880	·36877	+·00003	·36878	
„ 30	12 39	2·7101	1·56	31·8	−2·3	4·635	88·30	26 32 56	10 48 5	31·6	4·545	88·30	G. S. J.	937·91	·36885	·36884	+·00001	·36884	
„ „	15 29	2·7105	1·57	31·1	„	4·407	88·30	26 33 29	10 48 17	31·5	4·390	88·30	G. S. J.	937·71	·36869	·36868	+·00001	·36868	
May 7	12 35	2·7097	1·59	30·9	−2·0	4·280	88·97	26 34 26	10 48 36	31·0	4·175	88·97	G. S. J.	938·10	·36872	·36873	−·00001	·36872	
„ „	15 23	2·7101	1·58	31·0	„	3·945	88·95	26 35 12	10 48 56	30·9	3·855	88·95	G. S. J.	938·17	·36860	·36860	·00000	·36860	
„ 14	13 10	2·7086	1·57	31·0	−2·2	4·850	89·60	26 33 25	10 48 25	30·6	4·630	89·60	G. S. J.	938·21	·36904	·36899	+·00005	·36901	
„ „	15 27	2·7092	1·58	30·5	„	4·410	89·60	26 33 55	10 48 34	30·4	4·455	89·60	G. S. J.	937·95	·36887	·36883	+·00004	·36885	
„ 21	12 51	2·7096	1·57	31·5	−2·4	4·785	90·32	26 32 4	10 47 44	31·9	4·690	90·32	G. S. J.	937·82	·36896	·36895	+·00001	·36895	·368844
„ „	14 53	2·7106	1·60	31·8	„	4·285	90·32	26 32 41	10 48 1	31·9	4·405	90·32	G. S. J.	937·73	·36878	·36877	+·00001	·36877	
„ 28	13 5	2·7093	1·59	31·9	−2·4	4·730	91·30	26 31 49	10 47 39	32·1	4·575	91·30	G. S. J.	937·99	·36904	·36904	·00000	·36904	
„ „	15 28	2·7107	1·58	32·4	„	3·980	91·30	26 32 20	10 47 55	32·3	4·165	91·30	G. S. J.	937·86	·36882	·36880	+·00002	·36881	
June 4	14 9	2·7097	1·59	32·0	−2·2	4·062	92·30	26 32 31	10 47 51	32·1	4·022	92·30	G. S. J.	938·06	·36893	·36894	−·00001	·36893	
„ „	15 33	2·7106	1·57	32·0	„	3·720	92·30	26 32 46	10 48 1	32·1	3·880	92·30	G. S. J.	937·84	·36877	·36876	+·00001	·36876	
„ 11	13 36	2·7067	1·57	28·1	−1·8	4·665	91·55	26 34 53	10 48 57	28·1	4·550	91·55	G. S. J.	938·02	·36911	·36906	+·00005	·36908	
„ „	15 27	2·7077	1·57	28·1	„	4·202	91·55	26 35 5	10 49 1	28·0	4·377	91·55	G. S. J.	937·69	·36896	·36892	+·00004	·36894	
„ 18	13 40	2·7095	1·57	31·2	−1·7	4·583	91·00	26 32 36	10 48 1	31·5	4·385	91·00	G. S. J.	937·89	·36893	·36890	+·00003	·36891	·368935
„ „	15 7	2·7101	1·58	31·7	„	4·107	91·00	26 32 46	10 47 58	31·7	4·207	91·00	G. S. J.	937·82	·36885	·36886	−·00001	·36885	
„ 25	13 11	2·7052	1·56	26·3	−2·0	4·776	90·40	26 36 30	10 49 31	26·2	4·615	90·40	G. S. J.	938·12	·36916	·36912	+·00004	·36914	
„ „	15 27	2·7066	1·57	26·2	„	4·260	90·40	26 37 17	10 49 47	26·1	4·377	90·40	G. S. J.	937·80	·36888	·36886	+·00002	·36887	
July 2	12 45	2·7087	1·58	29·7	−1·4	4·340	89·80	26 34 22	10 48 41	29·8	4·315	89·80	G. S. J.	937·93	·36887	·36884	+·00003	·36885	
„ „	15 27	2·7093	1·56	29·9	„	4·052	89·77	26 34 32	10 48 47	29·8	4·207	89·77	G. S. J.	937·80	·36878	·36875	+·00003	·36876	
„ 9	12 27	2·7064	1·57	27·4	−1·5	4·972	89·30	26 34 56	10 48 50	27·6	5·105	89·30	G. S. J.	937·82	·36912	·36911	+·00001	·36911	
„ „	15 18	2·7073	1·58	27·9	„	4·655	89·30	26 35 17	10 48 57	27·7	4·878	89·30	G. S. J.	937·71	·36899	·36899	·00000	·36899	
„ 16	13 4	2·7068	1·59	28·3	−1·5	4·860	88·70	26 35 3	10 48 56	28·2	4·711	88·70	G. S. J.	938·06	·36908	·36905	+·00003	·36906	
„ „	15 37	2·7074	1·59	27·7	„	4·306	88·70	26 35 59	10 49 25	27·8	4·475	88·70	G. S. J.	937·95	·36888	·36882	+·00006	·36885	·368956
„ 23	12 45	2·7072	1·57	28·2	−1·2	4·886	87·35	26 34 57	10 48 58	28·4	4·835	87·35	G. S. J.	937·95	·36901	·36897	+·00004	·36899	
„ „	15 23	2·7077	1·58	28·1	„	4·365	87·32	26 36 12	10 49 24	27·9	4·505	87·32	G. S. J.	937·95	·36885	·36882	+·00003	·36883	
„ 30	12 41	2·7070	1·57	28·8	−1·4	5·257	86·70	26 33 52	10 48 26	28·9	5·285	86·70	G. S. J.	937·93	·36916	·36915	+·00001	·36915	
„ „	15 21	2·7080	1·57	29·0	„	4·755	86·75	26 34 17	10 48 38	29·0	4·970	86·75	G. S. J.	937·78	·36899	·36896	+·00003	·36897	

Aug.	6	12	48	2·7075	1·56	28·3	−1·9	4·938	86·25	26	34	41	10	48	52	28·6	4·868	86·25	G. S. J.	937·84	·36899	·36894	+·00005	·36896		
,,	,,	15	25	2·7080	1·56	28·6	,,	4·659	86·25	26	34	57	10	48	55	28·6	4·735	86·25	G. S. J.	937·80	·36892	·36889	+·00003	·36890		
,,	13	12	30	2·7080	1·57	29·7	−2·0	4·635	86·60	26	34	25	10	48	37	29·7	4·520	86·60	G. S. J.	938·10	·36897	·36897	·00000	·36897		
,,	,,	15	17	2·7096	1·58	30·0	,,	4·218	86·60	26	34	36	10	48	43	30·0	4·378	86·60	G. S. J.	937·76	·36872	·36871	+·00001	·36871		
,,	20	12	44	2·7077	1·57	29·2	−1·5	4·861	87·20	26	34	0	10	48	31	28·9	4·867	87·20	G. S. J.	937·82	·36908	·36906	+·00002	·36907	·368929	
,,	,,	15	25	2·7082	1·58	29·0	,,	4·571	87·20	26	34	33	10	48	39	29·1	4·652	87·20	G. S. J.	937·78	·36892	·36893	−·00001	·36892		
,,	27	12	30	2·7070	1·57	28·7	−1·9	4·717	86·90	26	34	50	10	48	47	28·7	4·638	86·90	G. S. J.	938·12	·36906	·36906	·00000	·36906		
,,	,,	15	12	2·7083	1·58	29·0	,,	4·271	87·00	26	35	5	10	48	58	29·0	4·310	87·00	G. S. J.	937·89	·36886	·36882	+·00004	·36884		
Sept.	3	13	30	2·7076	1·58	27·6	−2·1	4·027	87·40	26	36	37	10	49	33	27·8	4·012	87·40	G. S. J.	938·02	·36878	·36876	+·00002	·36877		
,,	,,	15	27	2·7079	1·57	27·5	,,	4·060	87·40	26	36	30	10	49	27	27·7	4·092	87·40	G. S. J.	937·78	·36875	·36874	+·00001	·36874		
,,	10	13	24	2·7091	1·57	28·8	−1·7	3·870	87·55	26	36	22	10	49	27	28·7	3·865	87·55	G. S. J.	937·89	·36863	·36860	+·00003	·36861		
,,	,,	15	8	2·7086	1·57	28·8	,,	3·715	87·55	26	36	12	10	49	22	28·7	3·851	87·55	G. S. J.	937·99	·36871	·36870	+·00001	·36870		
,,	17	13	25	2·7070	1·58	28·8	−2·3	†8·927	87·90	26	35	10	10	49	5	28·7	†8·747	87·90	A.	938·30	·36904	·36899	+·00005	·36901	·368799	
,,	,,	15	22	2·7089	1·57	29·0	,,	8·253	87·90	26	35	45	10	49	13	28·8	8·339	87·90	A.	937·84	·36873	·36871	+·00002	·36872		
,,	24	12	21	2·7078	1·54	29·0	−2·2	8·735	88·30	26	35	26	10	49	5	28·6	8·731	88·30	A.	938·08	·36893	·36890	+·00003	·36891		
,,	,,	14	29	2·7076	1·54	28·7	,,	8·523	88·30	26	35	17	10	49	2	28·7	8·616	88·30	A.	938·08	·36894	·36892	+·00002	·36893		
Oct.	1	13	25	2·7083	1·59	30·2	−2·2	8·748	88·80	26	33	49	10	48	30	30·0	8·580	88·80	A.	938·06	·36900	·36897	+·00003	·36898		
,,	,,	14	49	2·7091	1·57	30·2	,,	8·296	88·80	26	34	25	10	48	42	30·0	8·393	88·80	A.	937·95	·36884	·36882	+·00002	·36883		
,,	8	12	54	2·7108	1·59	30·9	−2·0	7·315	89·60	26	35	41	10	49	11	30·8	7·277	89·60	A.	938·04	·36846	·36843	+·00003	·36844		
,,	,,	14	34	2·7106	1·57	31·0	,,	7·416	89·60	26	35	36	10	49	10	31·0	7·328	89·60	A.	938·14	·36849	·36845	+·00004	·36847		
,,	15	12	42	2·7072	1·57	29·7	−1·9	8·742	89·70	26	33	30	10	48	27	30·1	8·568	89·70	A.	938·30	·36915	·36910	+·00005	·36912		
,,	,,	14	41	2·7098	1·57	31·0	,,	8·405	89·70	26	32	7	10	47	51	31·1	8·435	89·70	A.	937·52	·36896	·36892	+·00004	·36894	·368885	
,,	22	13	0	2·7077	1·59	29·7	−2·4	8·435	89·45	26	34	12	10	48	45	30·0	8·358	89·45	A.	938·32	·36900	·36894	+·00006	·36897		
,,	,,	14	11	2·7086	1·55	30·5	,,	8·392	89·45	26	33	55	10	48	31	30·3	8·361	89·45	A.	938·14	·36896	·36894	+·00002	·36895		
,,	29	13	1	2·7077	1·57	30·2	−2·5	8·931	89·20	26	33	16	10	48	8	30·3	8·718	89·20	G. S. J.	938·12	·36912	·36914	−·00002	·36913		
,,	,,	15	26	2·7086	1·56	30·7	,,	8·385	89·20	26	33	12	10	48	14	30·6	8·458	89·20	G. S. J.	938·04	·36903	·36901	+·00002	·36902		
Nov.	5	13	21	2·7083	1·57	29·8	−2·1	8·486	89·00	26	34	11	10	48	35	30·1	8·262	89·00	G. S. J.	938·06	·36893	·36891	+·00002	·36892		
,,	,,	15	27	2·7093	1·57	30·2	,,	7·956	89·00	26	34	55	10	48	50	30·1	7·945	89·00	G. S. J.	937·99	·36875	·36874	+·00001	·36874		
,,	12	13	11	2·7070	1·57	28·6	−2·3	8·739	88·42	26	34	26	10	48	41	28·8	8·688	88·42	G. S. J.	938·02	·36909	·36907	+·00002	·36908		
,,	,,	15	20	2·7081	1·57	29·3	,,	8·368	88·45	26	34	35	10	48	50	29·0	8·467	88·45	G. S. J.	937·93	·36897	·36893	+·00004	·36895		
,,	19	13	12	2·7065	1·57	28·1	−2·8	8·803	87·72	26	35	22	10	49	2	28·1	8·637	87·72	G. S. J.	938·19	·36908	·36906	+·00002	·36907	·368951	
,,	,,	15	25	2·7079	1·57	28·6	,,	8·310	87·75	26	35	41	10	49	18	28·4	8·410	87·75	G. S. J.	938·04	·36888	·36882	+·00006	·36885		
,,	26	13	1	2·7071	1·58	28·8	−2·2	8·902	87·40	26	34	16	10	48	37	29·0	8·787	87·40	G. S. J.	938·04	·36910	·36908	+·00002	·36909		
,,	,,	15	27	2·7080	1·57	29·1	,,	8·492	87·40	26	34	52	10	48	51	29·1	8·545	87·40	G. S. J.	937·97	·36892	·36890	+·00002	·36891		
Dec.	3	13	8	2·7065	1·58	27·8	−2·5	8·660	87·00	26	35	31	10	49	9	28·0	8·545	87·00	G. S. J.	938·14	·36905	·36901	+·00004	·36903		
,,	,,	15	21	2·7079	1·57	28·7	,,	8·200	87·02	26	35	48	10	49	10	28·5	8·281	87·02	G. S. J.	938·06	·36886	·36885	+·00001	·36885		
,,	10	13	5	2·7068	1·51	28·1	−2·5	8·743	86·80	26	35	22	10	49	2	28·1	8·681	86·80	G. S. J.	938·08	·36904	·36902	+·00002	·36903		
,,	,,	14	45	2·7080	1·51	28·2	,,	8·378	86·80	26	35	26	10	49	1	28·2	8·536	86·80	G. S. J.	937·71	·36887	·36887	·00000	·36887		
,,	17	13	8	2·7072	1·50	28·1	−2·2	8·706	86·27	26	35	28	10	49	2	28·4	8·645	86·27	G. S. J.	938·04	·36895	·36894	+·00001	·36894		
,,	,,	15	17	2·7083	1·50	28·8	,,	8·355	86·30	26	35	28	10	49	6	28·8	8·444	86·30	G. S. J.	937·93	·36882	·36880	+·00002	·36881	·368914	
,,	24	12	42	2·7062	1·50	25·9	−2·5	8·525	85·70	26	37	53	10	50	0	25·9	8·485	85·70	G. S. J.	938·02	·36887	·36884	+·00003	·36885		
,,	,,	14	51	2·7062	1·50	26·2	,,	8·603	85·70	26	37	20	10	49	51	26·0	8·622	85·70	G. S. J.	937·95	·36894	·36890	+·00004	·36892		
,,	31	13	1	2·7056	1·49	26·0	−2·5	8·722	84·90	26	37	36	10	49	53	26·0	8·637	84·90	G. S. J.	938·17	·36898	·36896	+·00002	·36897		
,,	,,	14	43	2·7063	1·51	26·5	,,	8·420	84·90	26	37	38	10	49	55	26·3	8·503	84·90	G. S. J.	938·10	·36888	·36887	+·00001	·36887		
																			Mean for the year	938·03			+·000022			

The mean *observed value of the Horizontal Force for the year 1913 = 0·368882

*The monthly and annual means corrected for diurnal variation appear in Table VIII.

† Adjustment of H. F. Magnetograph on the 15th September.

Absolute Magnetical Observations, Alibag—Table Ib.

Observations of Vibration and Deflection, taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.) for the determination of Absolute Horizontal Force.

1913.

1913. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Effect of 90° Torsion.	Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Angle of Deflection. Distance. 23 cms.	30 cms.	Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 23 cms. (H_{27}).	30 cms. (H_{30}).	Difference. $H_{27}-H_{30}$	Mean. $\frac{H_{27}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
JAN. 6	12 55	2·8756	2·13	26·6	−2·0	5·606	83·92	23 38 35	10 25 38	26·8	5·621	83·92	G. S. J.	911·28	0·36911	0·36905	+·00006	0·36908	
„ „	15 8	2·8775	2·02	26·8	„	5·360	83·97	23 38 43	10 25 37	26·9	5·483	83·97	G. S. J.	910·75	·36886	·36882	+·00004	·36884	
„ 20	12 56	2·8765	1·98	25·6	−2·1	5·187	82·97	23 40 23	10 26 17	26·1	5·050	82·97	G. S. J.	911·17	·36877	·36874	+·00003	·36875	0·369012
„ „	15 13	2·8774	1·98	26·6	„	5·132	83·02	23 39 38	10 26 10	26·6	5·083	83·02	G. S. J.	911·05	·36878	·36869	+·00009	·36873	
„ 27	10 33	2·8741	2·00	25·3	−2·2	6·237	82·70	23 36 54	10 24 57	27·0	6·467	82·70	G. S. J.	911·02	·36939	·36932	+·00007	·36935	
„ „	12 7	2·8753	1·94	26·5	„	6·415	82·70	23 37 12	10 25 8	26·3	6·548	82·70	G. S. J.	910·88	·36936	·36928	+·00008	·36932	
FEB. 3	13 19	2·8761	1·95	26·7	−2·4	5·580	82·50	23 39 26	10 25 56	26·7	5·431	82·50	G. S. J.	911·38	·36898	·36893	+·00005	·36895	
„ „	15 25	2·8774	1·84	26·9	„	5·353	82·55	23 38 47	10 25 45	26·9	5·380	82·55	G. S. J.	910·92	·36889	·36882	+·00007	·36885	
„ 10	12 56	2·8.70	1·95	27·3	−2·2	5·572	82·85	23 39 8	10 25 51	26·8	5·392	82·85	G. S. J.	911·17	·36894	·36888	+·00006	·36891	
„ „	15 20	2·8774	2·06	26·9	„	5·197	82·85	23 39 10	10 25 51	26·8	5·235	82·85	G. S. J.	910·94	·36884	·36878	+·00006	·36881	
„ 17	13 18	2·8772	1·93	27·2	−2·0	5·380	82·85	23 39 29	10 25 54	26·8	5·132	82·85	G. S. J.	911·15	·36886	·36882	+·00004	·36884	·368876
„ „	15 27	2·8776	1·99	26·9	„	5·006	82·87	23 39 43	10 26 7	26·9	5·013	82·87	G. S. J.	911·11	·36874	·36868	+·00006	·36871	
„ 24	13 5	2·8766	1·88	27·4	−1·8	5·718	83·30	23 38 40	10 25 45	26·1	5·584	83·30	G. S. J.	911·07	·36911	·36903	+·00008	·36907	
„ „	15 23	2·8771	1·99	26·4	„	5·353	83·30	23 39 16	10 25 51	26·1	5·469	83·30	G. S. J.	910·81	·36889	·36885	+·00004	·36887	
MARCH 3	13 32	2·8762	1·98	26·5	−2·3	5·780	83·20	23 39 2	10 25 44	26·3	5·707	83·20	G. S. J.	911·07	·36902	·36899	+·00003	·36900	
„ „	15 20	2·8760	1·92	26·1	„	5·578	83·20	23 39 22	10 25 43	26·0	5·605	83·20	G. S. J.	911·05	·36900	·36901	−·00001	·36900	
„ 10	13 39	2·8761	1·73	27·0	−2·1	6·075	83·35	23 38 56	10 25 37	25·8	5·815	83·35	G. S. J.	911·09	·36916	·36914	+·00002	·36915	
„ „	15 26	2·8764	1·88	26·1	„	5·366	83·37	23 39 25	10 25 57	25·8	5·517	83·37	G. S. J.	910·98	·36897	·36892	+·00005	·36894	
„ 17	12 50	2·8773	2·07	27·1	−2·3	5·175	83·57	23 39 32	10 25 52	27·1	4·842	83·57	G. S. J.	911·13	·36879	·36877	+·00002	·36878	
„ „	15 15	2·8784	1·89	26·8	„	4·746	83·57	23 39 49	10 26 2	26·8	4·785	83·57	G. S. J.	910·79	·36864	·36860	+·00004	·36862	·368921
„ 24	12 42	2·8774	1·86	28·4	−1·9	5·585	83·95	23 38 1	10 25 28	27·2	5·432	83·95	G. S. J.	911·07	·36909	·36900	+·00009	·36904	
„ „	15 24	2·8778	1·83	27·7	„	5·022	83·95	23 38 25	10 25 37	27·1	5·195	83·95	G. S. J.	910·90	·36894	·36886	+·00008	·36890	
„ 31	12 42	2·8773	1·77	27·8	−2·0	5·170	84·32	23 39 2	10 25 45	26·9	5·050	84·32	G. S. J.	911·17	·36896	·36891	+·00005	·36893	
„ „	15 29	2·8779	1·82	27·7	„	5·025	84·37	23 38 37	10 25 40	27·3	5·050	84·37	G. S. J.	910·96	·36888	·36882	+·00006	·36885	
APRIL 7	12 56	2·8769	1·89	29·6	−2·2	6·009	85·00	23 36 6	10 24 29	29·0	5·606	85·00	G. S. J.	911·23	·36933	·36929	+·00004	·36931	
„ „	15 31	2·8783	1·89	29·2	„	5·157	85·00	23 36 33	10 24 48	29·0	5·276	85·00	G. S. J.	910·88	·36905	·36899	+·00006	·36902	
„ 14	13 21	2·8800	1·82	30·6	−2·3	4·862	86·00	23 37 30	10 24 55	29·8	4·635	86·00	G. S. J.	911·02	·36877	·36879	−·00002	·36878	
„ „	15 40	2·8805	1·76	29·8	„	4·321	86·00	23 37 47	10 25 20	29·6	4·397	86·00	G. S. J.	910·86	·36863	·36855	+·00008	·36859	·368914
„ 21	12 48	2·8783	1·76	30·0	−2·4	5·217	86·85	23 35 48	10 24 25	30·2	5·011	86·85	G. S. J.	911·07	·36911	·36906	+·00005	·36908	
„ „	15 20	2·8796	1·93	30·3	„	4·680	86·85	23 35 37	10 24 26	30·2	4·780	86·85	G. S. J.	910·69	·36899	·36891	+·00008	·36895	
„ 28	13 10	2·8799	1·89	30·9	−2·4	4·557	87·90	23 36 56	10 24 42	30·2	4·538	87·90	G. S. J.	911·02	·36884	·36885	−·00001	·36884	
„ „	15 16	2·8801	1·80	30·1	„	4·148	87·95	23 36 48	10 24 55	30·0	4·303	87·95	G. S. J.	910·81	·36878	·36871	+·00007	·36874	

May	5	12	59	2·8815	1·73	30·7	−2·1	3·870	88·82	23	37	37	10	25	6	29·8	4·142	88·82	G.	S.	J.	910·67	·36858	·36855	+·00003	·36856	·368390
„	„	15	32	2·8802	1·83	30·0	„	4·170	88·80	23	36	59	10	25	7	29·7	4·115	88·80	G.	S.	J.	910·79	·36877	·36866	+·00011	·36871	
„	12	13	17	2·8790	1·86	31·0	−2·2	5·010	89·45	23	35	35	10	24	24	30·2	4·845	89·45	G.	S.	J.	911·02	·36913	·36906	+·00007	·36909	
„	„	15	4	2·8798	1·87	30·6	„	4·560	89·45	23	35	45	10	24	23	30·2	4·640	89·45	G.	S.	J.	910·71	·36898	·36894	+·00004	·36896	
„	19	13	7	2·8793	1·89	31·1	−2·3	4·560	90·00	23	35	47	10	24	22	29·9	4·610	90·00	G.	S.	J.	910·90	·36910	·36906	+·00004	·36908	
„	„	15	35	2·8801	1·86	30·0	„	4·135	90·00	23	36	17	10	24	38	29·8	4·345	90·00	G.	S.	J.	910·56	·36885	·36880	+·00005	·36882	
„	26	13	9	2·8801	1·75	32·0	−2·5	4·565	91·10	23	35	22	10	24	14	31·1	4·325	91·10	G.	S.	J.	911·02	·36903	·36899	+·00004	·36901	
„	„	15	35	2·8806	1·86	31·7	„	4·055	91·10	23	35	27	10	24	20	31·1	4·080	91·10	G.	S.	J.	910·84	·36893	·36886	+·00007	·36889	
June	2	13	35	2·8812	1·68	31·6	−2·2	3·730	92·00	23	36	6	10	24	38	31·3	3·520	92·00	G.	S.	J.	910·92	·36876	·36868	+·00008	·36872	·368923
„	„	15	35	2·8816	1·75	31·5	„	3·518	92·00	23	36	21	10	24	42	31·4	3·492	92·00	G.	S.	J.	910·84	·36865	·36859	+·00006	·36862	
„	9	13	12	2·8771	1·68	28·4	−1·8	4·772	92·30	23	36	1	10	24	36	28·5	4·571	92·30	G.	S.	J.	910·88	·36927	·36919	+·00008	·36923	
„	„	15	37	2·8786	1·83	28·4	„	3·867	92·30	23	36	22	10	24	52	28·3	4·095	92·30	G.	S.	J.	910·48	·36904	·36893	+·00011	·36898	
„	16	13	41	2·8793	1·75	29·9	−1·7	4·585	91·10	23	35	55	10	24	33	29·8	4·447	91·10	G.	S.	J.	910·73	·36900	·36893	+·00007	·36896	
„	„	15	25	2·8796	1·78	29·8	„	4·021	91·10	23	36	14	10	24	41	29·7	4·160	91·10	G.	S.	J.	910·69	·36892	·36885	+·00007	·36888	
„	23	13	42	2·8775	1·82	27·8	−1·9	4·397	90·90	23	37	51	10	25	15	27·1	4·368	90·90	G.	S.	J.	910·77	·36905	·36901	+·00004	·36903	
„	„	15	37	2·8776	1·84	27·0	„	4·261	90·80	23	38	7	10	25	25	26·7	4·400	90·80	G.	S.	J.	910·60	·36898	·36892	+·00006	·36895	
„	30	13	4	2·8781	1·95	28·8	−1·6	4·556	89·90	23	36	44	10	24	55	28·8	4·360	89·90	G.	S.	J.	910·86	·36904	·36895	+·00009	·36899	
„	„	15	36	2·8790	1·89	28·6	„	4·097	89·87	23	36	50	10	24	52	28·7	4·186	89·87	G.	S.	J.	910·54	·36890	·36885	+·00005	·36887	
July	7	12	53	2·8770	1·90	27·9	−1·5	4·967	89·40	23	36	30	10	24	46	28·0	4·813	89·40	G.	S.	J.	910·77	·36921	·36914	+·00007	·36917	·369011
„	„	15	32	2·8780	1·84	28·3	„	4·398	89·40	23	36	56	10	24	46	28·2	4·527	89·40	G.	S.	J.	910·67	·36904	·36903	+·00001	·36903	
„	14	12	51	2·8792	1·88	28·7	−1·6	4·117	88·75	23	37	35	10	25	11	28·5	4·047	88·75	G.	S.	J.	910·69	·36882	·36876	+·00006	·36879	
„	„	15	34	2·8787	1·84	28·5	„	4·071	88·72	23	37	40	10	25	12	28·3	4·112	88·72	G.	S.	J.	910·75	·36887	·36882	+·00005	·36884	
„	21	12	59	2·8783	1·75	28·0	−1·1	4·753	87·60	23	37	7	10	25	11	28·1	4·467	87·60	G.	S.	J.	910·67	·36897	·36886	+·00011	·36891	
„	„	15	31	2·8786	1·80	28·0	„	4·153	87·60	23	37	35	10	25	4	28·2	4·257	87·60	G.	S.	J.	910·63	·36886	·36884	+·00002	·36885	
„	28	12	57	2·8756	1·90	27·7	−1·8	5·462	86·75	23	36	38	10	24	48	27·1	5·433	86·75	G.	S.	J.	911·00	·36944	·36938	+·00006	·36941	
„	„	15	29	2·8777	1·90	27·3	„	4·877	86·72	23	36	50	10	24	50	26·9	5·102	86·72	G.	S.	J.	910·25	·36911	·36907	+·00004	·36909	
Aug.	4	12	58	2·8772	1·86	28·4	−1·4	5·127	86·60	23	36	37	10	24	31	28·1	5·056	86·60	G.	S.	J.	910·77	·36920	·36922	−·00002	·36921	·368996
„	„	15	25	2·8784	1·86	28·1	„	4·841	86·60	23	36	2	10	24	40	28·1	4·983	86·60	G.	S.	J.	910·29	·36910	·36900	+·00010	·36905	
„	11	13	4	2·8787	1·95	29·1	−1·6	4·584	86·40	23	36	33	10	24	40	28·9	4·637	86·40	G.	S.	J.	910·65	·36899	·36896	+·00003	·36897	
„	„	15	30	2·8789	1·81	28·8	„	4·615	86·40	23	36	43	10	24	50	28·7	4·595	86·40	G.	S.	J.	910·58	·36894	·36889	+·00005	·36891	
„	18	12	59	2·8783	2·11	29·7	−1·8	4·520	87·00	23	37	26	10	25	2	29·0	4·236	87·00	G.	S.	J.	911·17	·36897	·36894	+·00003	·36895	
„	„	15	26	2·8796	1·99	29·4	„	4·081	87·00	23	37	3	10	24	54	29·2	4·050	87·00	G.	S.	J.	910·65	·36882	·36878	+·00004	·36880	
„	25	12	49	2·8779	2·00	28·4	−2·0	4·728	87·00	23	36	42	10	24	42	28·3	4·750	87·00	G.	S.	J.	910·65	·36907	·36905	+·00002	·36906	
„	„	15	21	2·8785	1·98	28·3	„	4·687	87·05	23	36	17	10	24	32	28·3	4·830	87·05	G.	S.	J.	910·31	·36904	·36901	+·00003	·36902	
Sept.	2	13	33	2·8778	1·95	27·2	−2·1	4·297	87·50	23	39	19	10	25	52	25·9	4·107	87·50	G.	S.	J.	910·73	·36888	·36884	+·00004	·36886	·368907
„	„	15	39	2·8780	1·73	26·8	„	3·967	87·50	23	38	31	10	25	36	26·5	4·020	87·50	G.	S.	J.	910·52	·36888	·36882	+·00006	·36885	
„	8	14	10	2·8790	2·24	28·3	−1·7	3·832	87·50	23	37	57	10	25	18	27·8	3·872	87·50	G.	S.	J.	910·54	·36880	·36876	+·00004	·36878	
„	„	15	45	2·8805	2·20	28·0	„	2·962	87·47	23	37	57	10	25	21	27·9	3·703	87·47	G.	S.	J.	910·04	·36857	·36852	+·00005	·36854	
„	15	14	47	2·8787	2·30	28·5	−2·0	†8·362	87·80	23	37	0	10	24	51	28·6	†8·352	87·80		A.		910·54	·36888	·36886	+·00002	·36887	
„	„	16	9	2·8790	2·31	28·8	„	8·367	87·80	23	37	0	10	24	55	28·7	8·342	87·80		A.		910·56	·36887	·36882	+·00005	·36884	
„	22	12	36	2·8773	2·34	28·5	−2·2	9·150	88·25	23	35	12	10	24	16	28·6	9·057	88·25		A.		910·48	·36928	·36921	+·00007	·36924	
„	„	14	41	2·8795	2·28	28·8	„	8·163	88·25	23	38	17	10	25	12	28·7	8·570	88·25		A.		910·69	·36865	·36868	−·00003	·36866	
„	29	12	59	2·8772	2·49	29·3	−2·1	8·810	88·60	23	34	42	10	23	46	29·2	8·658	88·60		A.		910·54	·36937	·36938	−·00001	·36937	
„	„	15	16	2·8788	2·47	29·8	„	8·470	88·60	23	35	33	10	24	16	29·5	8·526	88·60		A.		910·54	·36908	·36905	+·00003	·36906	
Oct.	6	13	41	2·8827	2·43	30·8	−2·3	6·793	89·30	23	37	34	10	25	11	31·0	6·702	89·30		A.		910·50	·36829	·36823	+·00006	·36826	·368901
„	„	14	56	2·8830	2·39	31·0	„	6·880	89·30	23	37	39	10	25	13	31·0	6·725	89·30		A.		910·48	·36826	·36821	+·00005	·36823	
„	13	13	4	2·8779	2·43	28·8	−1·9	8·418	89·65	23	36	12	10	24	41	29·5	8·286	89·65		A.		910·86	·36903	·36895	+·00008	·36899	
„	„	14	52	2·8793	2·41	29·8	„	8·082	89·70	23	36	30	10	24	39	29·3	8·177	89·70		A.		910·60	·36892	·36889	+·00003	·36890	
„	20	11	33	2·8779	2·43	28·6	−2·0	8·450	89·45	23	36	20	10	24	38	28·5	8·333	89·45		A.		910·58	·36909	·36904	+·00005	·36906	
„	„	12	57	2·8796	2·45	29·0	„	7·858	89·42	23	36	47	10	24	45	28·6	8·168	89·42		A.		910·27	·36883	·36882	+·00001	·36882	
„	27	12	58	2·8783	2·62	30·5	−2·5	8·946	89·20	23	34	47	10	24	0	30·1	8·600	89·20	G.	S.	J.	910·71	·36922	·36918	+·00004	·36920	
„	„	15	17	2·8792	2·61	30·1	„	8·310	89·25	23	35	50	10	24	20	30·1	8·317	89·25	G.	S.	J.	910·65	·36896	·36894	+·00002	·36895	

† Adjustment of H. F. Magnetograph on the 15th September.

1913. Date.	Civil Time, Mean.	*Vibration Magnet. Time of one Vibration.	Effect of 90° Torsion.	Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Angle of Deflection. Distance. 23 cms.	30·0 cms.	Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 23 cms. (H).	30·0 cms. (H_{30}).	Difference. $H_{23}-H_{30}$	Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
Nov. 3	13 4	2·8791	2·28	29·8	−2·3	8·532	89·02	23 36 45	10 24 46	29·1	8·344	89·02	G. S. J.	910·73	0·36894	0·36891	+·00003	0·36892	
„ „	15 14	2·8801	2·28	29·6	„	7·832	89·00	23 36 51	10 25 0	29·4	7·965	89·00	G. S. J.	910·54	·36876	·36866	+·00010	·36871	
„ 10	12 54	2·8796	2·23	29·8	−2·2	8·548	88·60	23 35 24	10 24 9	30·3	8·434	88·60	G. S. J.	910·44	·36894	·36892	+·00002	·36893	
„ „	14 44	2·8802	2·23	30·0	„	8·156	88·60	23 35 49	10 24 35	30·0	8·238	88·60	G. S. J.	910·44	·36886	·36877	+·00009	·36881	
„ 17	13 18	2·8778	2·25	28·5	−2·6	8·810	87·95	23 36 2	10 24 31	28·9	8·701	87·95	G. S. J.	910·65	·36911	·36905	+·00006	·36908	0·368901
„ „	15 22	2·8785	2·26	28·6	„	8·583	87·95	23 36 11	10 24 40	28·8	8·657	87·95	G. S. J.	910·48	·36901	·36894	+·00007	·36897	
„ 24	13 21	2·8779	2·23	28·4	−2·3	8·707	87·40	23 37 19	10 25 1	28·1	8·551	87·40	G. S. J.	910·75	·36899	·36896	+·00003	·36897	
„ „	15 24	2·8792	2·23	28·5	„	8·339	87·40	23 36 48	10 24 56	28·6	8·373	87·40	G. S. J.	910·40	·36886	·36878	+·00008	·368 2	
Dec. 1	13 21	2·8784	2·30	28·4	−2·4	8·642	87·20	23 36 55	10 25 3	27·9	8·577	87·20	G. S. J.	910·52	·36899	·36890	+·00009	·36894	
„ „	15 0	2·8786	2·24	28·4	„	8·381	87·20	23 36 46	10 24 59	28·3	8·500	87·20	G. S. J.	910·50	·36896	·36887	+·00009	·36891	
„ 8	13 7	2·8783	2·33	27·7	−2·5	8·305	86·80	23 38 9	10 25 12	27·9	8·153	86·80	G. S. J.	910·65	·36880	·36881	−·00001	·36880	
„ „	15 1	2·8794	2·32	28·2	„	8·147	86·80	23 38 7	10 25 20	28·0	8·118	86·80	G. S. J.	910·46	·36870	·36866	+·00004	·36868	
„ 15	12 56	2·8766	2·28	26·7	−2·4	8·791	86·40	23 38 22	10 25 23	26·7	8·672	86·40	G. S. J.	910·81	·36902	·36900	+·00002	·36901	
„ „	15 18	2·8779	2·27	27·0	„	8·441	86·40	23 37 41	10 25 22	27·1	8·580	86·40	G. S. J.	910·44	·36892	·36882	+·00010	·36887	·368908
„ 22	13 43	2·8772	2·31	27·4	−2·3	8·590	85·87	23 37 58	10 25 26	26·6	8·611	85·87	G. S. J.	910·69	·36905	·36897	+·00008	·36901	
„ „	15 21	2·8774	2·36	27·0	„	8·622	85·87	23 38 15	10 25 22	26·7	8·641	85·87	G. S. J.	910·58	·36894	·36892	+·00002	·36893	
„ 29	13 40	2·8760	2·45	25·2	−2·5	8·601	84·90	23 38 26	10 25 42	25·6	8·473	84·90	G. S. J.	910·52	·36905	·36894	+·00011	·36899	
„ „	15 28	2·8765	2·54	25·7	„	8·481	84·90	23 38 31	10 25 46	25·7	8·462	84·90	G. S. J.	910·54	·36900	·36888	+·00012	·36894	
											Mean for the year		=	910·75			+·000052		
											The mean *observed value of the Horizontal Force for the year 1913		=						0·368922

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

Absolute Magnetical Observations, Alibag—Table IIa.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1913.

Taken with Magnetometer No. 7 (T. Cooke and Sons.)

1913. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Mean Readings. Collimator Magnet. Scale apparently Inverted.	Mean Readings. Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Mean Readings. Horizontal Circle with Telescope pointed to. Kennery Light House.	Torsion. Mean.	Torsion. Effect of 90°.	Observer.	Corresponding Reading of Declination. Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading Declination Magnetograms.	Monthly Mean. *Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JAN. 3	13 12	55·6	..	85 21 5	222 24 50	0	..	G. S. J.	5·630	0 49 40		
,, 9	15 45	55·6	..	85 20 15	222 24 45	0	..	G. S. J.	5·550	0 48 55		
,, 16	13 32	55·6	..	85 19 55	222 24 50	0	..	G. S. J.	5·560	0 48 30	5·575	0 48 47
,, 23	12 25	55·6	..	85 19 15	222 24 50	0	..	G. S. J.	5·500	0 47 50		
,, 30	13 12	55·6	..	85 20 25	222 24 50	0	..	G. S. J.	5·637	0 49 0		
FEB. 6	13 19	55·6	..	85 20 50	222 24 50	0	..	G. S. J.	5·675	0 49 25		
,, 13	13 12	55·6	..	85 20 25	222 24 45	0	..	G. S. J.	5·605	0 49 5		
,, 20	13 11	55·6	..	85 20 30	222 24 50	0	..	G. S. J.	5·657	0 49 5	5·638	0 49 6
,, 27	13 16	55·6	..	85 20 25	222 25 0	0	..	G. S. J.	5·615	0 48 50		
MAR. 7	11 53	55·6	..	85 19 5	222 24 55	0	..	G. S. J.	5·510	0 47 35		
,, 13	13 24	55·6	..	85 19 5	222 24 45	0	..	G. S. J.	5·520	0 47 45		
,, 20	13 7	55·6	..	85 18 25	222 24 45	0	..	G. S. J.	5·440	0 47 5	5·467	0 47 20
,, 27	13 20	55·6	..	85 18 0	222 24 30	0	..	G. S. J.	5·400	0 46 55		
APR. 3	12 39	55·6	..	85 18 30	222 24 25	0	..	G. S. J.	5·430	0 47 30		
,, 10	12 57	55·6	..	85 18 0	222 24 15	0	..	G. S. J.	5·385	0 47 10		
,, 17	13 12	55·6	..	85 17 35	222 24 20	0	..	G. S. J.	5·310	0 46 40	5·356	0 46 57
,, 24	12 29	55·6	..	85 17 25	222 24 20	0	..	G. S. J.	5·300	0 46 30		
MAY 1	13 1	55·6	..	85 17 0	222 24 5	0	..	G. S. J.	5·250	0 46 20		
,, 8	12 57	55·6	..	85 16 55	222 24 10	0	..	G. S. J.	5·210	0 46 10		
,, 15	13 20	55·6	..	85 16 50	222 24 5	0	..	G. S. J.	5·200	0 46 10	5·194	0 46 9
,, 22	13 17	55·6	..	85 16 25	222 23 35	0	..	G. S. J.	5·170	0 46 15		
,, 29	13 21	55·6	..	85 15 55	222 23 30	0	..	G. S. J.	5·140	0 45 50		
JUNE 5	13 10	55·6	..	85 15 45	222 23 35	0	..	G. S. J.	5·085	0 45 35		
,, 13	12 40	55·6	..	85 16 20	222 23 35	0	..	G. S. J.	5·200	0 46 10		
,, 19	13 21	55·6	..	85 15 55	222 23 35	0	..	G. S. J.	5·120	0 45 45	5·139	0 45 50
,, 26	14 39	55·6	..	85 16 5	222 23 40	0	..	G. S. J.	5·150	0 45 50		
JULY 3	12 55	55·6	..	85 16 25	222 23 50	0	..	G. S. J.	5·235	0 46 0		
,, 10	13 23	55·6	..	85 16 5	222 23 50	0	..	G. S. J.	5·210	0 45 40		
,, 17	13 17	55·6	..	85 15 25	222 24 5	0	..	G. S. J.	5·125	0 44 45	5·201	0 45 17
,, 24	12 58	55·6	..	85 15 40	222 23 55	0	..	G. S. J.	5·230	0 45 10		
,, 31	13 9	55·6	..	85 15 25	222 24 0	0	..	G. S. J.	5·205	0 44 50		
AUG. 8	12 55	55·6	..	85 16 15	222 24 0	0	..	G. S. J.	5·295	0 45 40		
,, 14	13 7	55·6	..	85 17 0	222 24 10	0	..	G. S. J.	5·335	0 46 15		
,, 21	12 50	55·6	..	85 15 25	222 24 10	0	..	G. S. J.	5·155	0 44 40	5·239	0 45 15
,, 28	12 45	55·6	..	85 15 15	222 24 15	0	..	G. S. J.	5·172	0 44 25		
SEPT. 5	12 12	55·6	..	85 13 30	222 24 20	0	..	G. S. J.	4·997	0 42 35		
,, 11	12 42	55·6	..	85 15 50	222 24 20	0	..	G. S. J.	5·220	0 44 55		
,, 18	13 31	55·6	..	85 15 5	222 24 50	0	..	A.	†5·170	0 43 40	..	0 44 4
,, 25	13 0	55·6	..	85 16 10	222 24 30	0	..	A.	5·292	0 45 5		
OCT. 2	12 28	55·6	..	85 15 45	222 24 55	0	..	A.	‡5·245	0 44 15		
,, 10	12 9	55·6	..	85 16 25	222 24 45	0	..	A.	5·272	0 45 5		
,, 16	12 12	55·6	..	85 16 25	222 24 50	0	..	A.	5·280	0 45 0	5·308	0 45 10
,, 23	12 39	55·6	..	85 15 50	222 24 50	0	..	A.	5·205	0 44 25		
,, 31	13 44	55·6	..	85 18 10	222 24 30	0	..	G. S. J.	5·537	0 47 5		
NOV. 6	13 15	55·6	..	85 17 55	222 24 20	0	..	G. S. J.	5·525	0 47 0		
,, 13	13 14	55·6	..	85 16 35	222 24 0	0	..	G. S. J.	5·400	0 46 0		
,, 20	12 53	55·6	..	85 16 55	222 23 55	0	..	G. S. J.	5·450	0 46 25	5·450	0 46 25
,, 27	13 13	55·6	..	85 16 45	222 23 55	0	..	G. S. J.	5·425	0 46 15		
DEC. 4	13 25	55·6	..	85 16 45	222 23 55	0	..	G. S. J.	5·510	0 46 15		
,, 11	13 21	55·6	..	85 17 25	222 23 50	0	..	G. S. J.	5·555	0 47 0		
,, 18	13 17	55·6	..	85 16 35	222 23 50	0	..	G. S. J.	5·485	0 46 10	5·527	0 46 34
,, 26	13 7	55·6	..	85 17 5	222 23 40	0	..	G. S. J.	5·557	0 46 50		

The mean observed Declination for the year 1913 = 0 ° 46 ′ 24 ″

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

† Owing to a shift in the zero line of the Declination Magnetograph on the 15th September, the ordinates were permanently increased by 0·60 cms.

‡ Owing to a shift in the zero line of the Declination Magnetograph on the 27th September, the ordinates were permanently increased by 0·40 cms.

Absolute Magnetical Observations, Alibag—Table IIb.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1913.

Taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.)

1913. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently Erect.	Mean Readings. Collimator Magnet. Scale apparently Inverted	Mean Readings. Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Mean Readings. Horizontal Circle with Telescope pointed to. Kennery Light House.	Torsion. Mean.	Torsion. Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	Monthly Mean. *Observed absolute Easterly Declination.
1	2.	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JAN. 3	13 31	34·05	35·00	276 19 45	53 23 0	0	..	G. S. J.	5·632	0 49 16		
„ 9	16 18	34·00	35·27	276 19 45	53 23 10	0	..	G. S. J.	5·582	0 48 48		
„ 16	14 12	34·05	35·15	276 19 10	53 23 10	0	..	G. S. J.	5·555	0 48 22	5·595	0 48 44
„ 23	12 53	34·15	35·15	276 18 45	53 23 10	0	..	G. S. J.	5·545	0 48 3		
„ 30	13 38	33·87	35·35	276 20 30	53 23 20	0	..	G. S. J.	5·660	0 49 10		
FEB. 6	13 54	33·85	35·45	276 20 45	53 23 10	0	..	G. S. J.	5·702	0 49 28		
„ 13	13 39	33·95	35·72	276 19 35	53 23 5	0	..	G. S. J.	5·577	0 48 14	5·642	0 48 39
„ 20	13 38	33·97	35·75	276 19 50	53 23 5	0	..	G. S. J.	5·663	0 48 28		
„ 27	13 41	33·97	35·50	276 19 50	53 23 20	0	..	G. S. J.	5·627	0 48 28		
MARCH 7	12 37	34·12	35·25	276 17 20	53 23 5	0	..	G. S. J.	5·470	0 46 36		
„ 13	13 52	34·00	35·57	276 19 20	53 23 10	0	..	G. S. J.	5·540	0 47 58		
„ 20	13 35	33·97	35·50	276 18 40	53 23 10	0	..	G. S. J.	5·450	0 47 28	5·472	0 47 20
„ 27	13 51	34·15	35·52	276 18 20	53 23 10	0	..	G. S. J.	5·430	0 47 17		
APRIL 3	13 13	34·05	35·52	276 18 20	53 23 20	0	..	G. S. J.	5·449	0 47 1		
„ 10	13 24	34·00	35·67	276 18 35	53 23 20	0	..	G. S. J.	5·422	0 47 5	5·382	0 46 42
„ 17	13 37	34·07	35·55	276 17 40	53 23 10	0	..	G. S. J.	5·342	0 46 30		
„ 24	13 25	33·92	35·90	276 17 50	53 23 10	0	..	G. S. J.	5·316	0 46 12		
MAY 1	13 30	34·00	35·60	276 17 25	53 23 15	0	..	G. S. J.	5·275	0 46 3		
„ 8	13 34	33·95	35·65	276 17 40	53 23 25	0	..	G. S. J.	5·265	0 46 3		
„ 15	13 50	33·95	35·52	276 17 55	53 23 25	0	..	G. S. J.	5·250	0 46 26	5·253	0 46 17
„ 22	14 19	34·00	35·80	276 18 30	53 23 20	0	..	G. S. J.	5·270	0 46 52		
„ 29	13 51	33·95	35·67	276 17 20	53 23 5	0	..	G. S. J.	5·205	0 46 1		
JUNE 5	14 5	33·97	35·72	276 17 55	53 23 15	0	..	G. S. J.	5·213	0 46 25		
„ 13	13 51	33·92	35·55	276 17 40	53 23 10	0	..	G. S. J.	5·231	0 46 22	5·199	0 45 57
„ 19	13 51	34·05	35·65	276 16 45	53 23 20	0	..	G. S. J.	5·171	0 45 18		
„ 26	15 8	34·00	35·50	276 17 5	53 23 20	0	..	G. S. J.	5·182	0 45 44		
JULY 3	13 27	33·95	35·62	276 17 20	53 23 20	0	..	G. S. J.	5·270	0 45 50		
„ 10	13 50	34·00	35·60	276 17 0	53 23 20	0	..	G. S. J.	5·208	0 45 33		
„ 17	13 51	34·02	35·75	276 16 35	53 23 20	0	..	G. S. J.	5·160	0 45 1	5·224	0 45 17
„ 24	13 27	33·95	35·57	276 16 35	53 23 20	0	..	G. S. J.	5·252	0 45 7		
„ 31	13 38	33·97	35·75	276 16 35	53 23 25	0	..	G. S. J.	5·230	0 44 53		
AUG. 8	13 36	34·02	35·75	276 16 55	53 23 25	0	..	G. S. J.	5·284	0 45 16		
„ 14	13 39	33·97	35·65	276 18 5	53 23 30	0	..	G. S. J.	5·372	0 46 24	5·267	0 45 20
„ 21	13 23	34·07	35·52	276 16 5	53 23 30	0	..	G. S. J.	5·161	0 44 37		
„ 28	13 19	34·00	35·80	276 16 50	53 23 30	0	..	G. S. J.	5·251	0 45 2		
SEPT. 5	12 46	34·00	35·60	276 13 20	53 22 50	0	..	G. S. J.	5·001	0 42 23		
„ 11	13 24	34·02	35·50	276 16 15	53 22 50	0	..	G. S. J.	5·281	0 45 25		0 44 45
„ 18	14 24	34·00	35·57	276 16 20	53 22 50	0	..	A.	†5·277	0 45 26		
„ 25	13 14	33·97	35·57	276 17 5	53 23 10	0	..	A.	5·311	0 45 48		
OCT. 2	12 59	34·00	35·50	276 16 20	53 23 20	0	..	A.	‡5·303	0 44 59		
„ 10	13 18	34·00	35·52	276 17 35	53 23 40	0	..	A.	5·413	0 45 53		
„ 16	12 41	34·05	35·57	276 16 50	53 23 20	0	..	A.	5·292	0 45 28	5·358	0 45 35
„ 23	13 4	34·02	35·65	276 16 45	53 23 45	0	..	A.	5·254	0 44 52		
„ 31	14 31	34·00	35·52	276 18 50	53 24 5	0	..	G. S. J.	5·529	0 46 43		
NOV. 6	13 50	33·90	35·67	276 19 15	53 24 5	0	..	G. S. J.	5·553	0 46 54		
„ 13	13 38	34·05	35·55	276 17 50	53 23 50	0	..	G. S. J.	5·419	0 45 59		
„ 20	13 25	33·95	35·35	276 17 50	53 23 45	0	..	G. S. J.	5·468	0 46 10	5·479	0 46 25
„ 27	13 51	34·00	35·50	276 18 20	53 23 40	0	..	G. S. J.	5·475	0 46 39		
DEC. 4	13 50	33·97	35·32	276 18 10	53 23 40	0	..	G. S. J.	5·532	0 46 38		
„ 11	13 52	33·97	35·30	276 18 40	53 23 50	0	..	G. S. J.	5·567	0 46 59	5·553	0 46 49
„ 18	13 44	34·02	35·32	276 17 45	53 23 35	0	..	G. S. J.	5·516	0 46 21		
„ 26	13 43	34·07	35·12	276 18 0	53 23 25	15°W	0·96	G. S. J.	5·598	0 47 18		

The mean* observed Declination for the year 1913 = 0 ° 46 ′ 29 ″

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

† Owing to a shift in the zero line of the Declination Magnetograph on the 15th September, the ordinates were permanently increased by 0·60 cms.

‡ Owing to a shift in the zero line of the Declination Magnetograph on the 27th September, the ordinates were permanently increased by 0·40 cms.

Absolute Magnetical Observations, Alibag—Table IIIa.

OBSERVATIONS OF INCLINATION, 1913.

Taken with Inductor No. 41 by Schulze and Galvanometer No. 200 by Plath.

1913. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	*Monthly mean Inclination. °	′
JAN.	2	12	10	12	37	G. S. J. and B. P.	24	0·99	24	0·02	24	0·50		
,,	3	11	54	12	44	G. S. J.	23	59·08	23	59·55	23	59·31		
,,	4	11	47	12	41	G. S. J.	24	0·54	23	59·71	24	0·12		
,,	6	11	1	11	41	B. P. and G. S. J.	23	59·36	24	0·37	23	59·86		
,,	9	13	43	14	52	G. S. J. and B. P.	23	58·95	23	59·70	23	59·32		
,,	10	11	59	12	29	B. P. and G. S. J.	24	0·28	24	0·18	24	0·23		
,,	11	13	11	13	58	G. S. J. and B. P.	24	1·91	24	1·20	24	1·55		
,,	14	12	16	12	55	G. S. J. and B. P.	23	59·16	23	58·64	23	58·90		
,,	15	11	39	12	6	B. P. and G. S. J.	23	59·45	23	59·33	23	59·39		
,,	16	12	30	13	11	G. S. J. and B. P.	24	0·85	23	59·92	24	0·38		
,,	17	12	11	12	41	B. P. and G. S. J.	23	58·60	23	58·72	23	58·66		
,,	18	12	3	12	38	G. S. J. and B. P.	23	58·92	23	59·78	23	59·35	23	59·94
,,	20	10	55	11	26	B. P. and G. S. J.	24	0·49	24	0·98	24	0·73		
,,	21	11	39	12	4	G. S. J. and B. P.	23	58·98	23	59·47	23	59·22		
,,	22	11	20	11	47	B. P. and G. S. J.	23	59·94	23	59·31	23	59·62		
,,	23	11	36	12	5	G. S. J. and B. P.	24	0·27	23	59·66	23	59·96		
,,	24	13	43	14	11	G. S. J. and B. P.	24	0·37	24	0·93	24	0·65		
,,	24	14	31	14	52	G. S. J. and B. P.	24	0·43	24	0·62	24	0·52		
,,	25	13	38	14	3	G. S. J. and B. P.	23	59·05	23	59·94	23	59·49		
,,	25	14	22	14	46	G. S. J. and B. P.	23	59·27	23	59·75	23	59·51		
,,	26	13	37	14	8	G. S. J. and B. P.	24	1·02	24	1·08	24	1·05		
,,	26	14	24	14	52	G. S. J. and B. P.	23	59·53	24	0·81	24	0·17		
,,	27	14	0	14	30	G. S. J. and B. P.	24	0·61	24	0·09	24	0·35		
,,	28	13	27	13	57	G. S. J. and B. P.	23	59·21	23	59·46	23	59·33		
,,	29	12	10	12	41	B. P. and G. S. J.	23	59·72	24	0·63	24	0·17		
,,	30	12	7	12	38	G. S. J. and B. P.	23	58·72	23	59·23	23	58·97		
,,	31	11	9	11	37	B. P. and G. S. J.	24	1·23	24	0·71	24	0·97		
FEB.	1	12	12	12	44	G. S. J. and B. P.	24	0·49	24	0·06	24	0·27		
,,	3	11	45	12	13	B. P. and G. S. J.	24	1·38	24	0·40	24	0·89		
,,	4	1	45	12	18	G. S. J. and B. P.	24	0·40	24	0·81	24	0·60		
,,	5	11	47	12	15	B. P. and G. S. J.	24	0·91	24	0·73	24	0·82		
,,	6	12	4	12	43	G. S. J. and B. P.	24	1·90	24	1·58	24	1·74		
,,	7	11	25	11	55	B. P. and G. S. J.	23	58·83	23	58·70	23	58·76		
,,	8	11	51	12	19	G. S. J. and B. P.	24	0·00	23	59·94	23	59·97		
,,	10	11	26	11	48	B. P. and G. S. J.	24	0·70	23	59·60	24	0·15		
,,	11	11	41	12	8	G. S. J. and B. P.	23	59·25	23	59·88	23	59·56		
,,	12	11	12	11	40	B. P. and G. S. J.	24	0·64	23	59·69	24	0·16		
,,	13	11	48	12	11	G. S. J. and B. P.	24	0·03	23	59·86	23	59·94		
,,	14	11	55	12	21	B. P. and G. S. J.	23	59·55	23	59·89	23	59·72		
,,	15	11	59	12	29	G. S. J. and B. P.	23	59·97	24	0·23	24	0·10	24	0·35
,,	17	11	6	11	36	B. P. and G. S. J.	23	59·64	23	59·77	23	59·70		
,,	18	12	48	13	15	G. S. J. and B. P.	24	1·08	24	1·14	24	1·11		
,,	19	11	31	11	59	B. P. and G. S. J.	23	59·59	24	0·60	24	0·09		
,,	20	12	4	12	36	G. S. J. and B. P.	23	59·83	24	0·42	24	0·12		
,,	21	11	46	12	13	B. P. and G. S. J.	23	59·45	23	59·78	23	59·61		
,,	22	11	37	12	12	G. S. J. and B. P.	24	0·65	24	0·19	24	0·42		
,,	24	10	57	11	18	B. P. and G. S. J.	24	0·75	23	59·84	24	0·29		
,,	25	12	28	13	10	G. S. J. and B. P.	24	0·17	24	0·61	24	0·39		
,,	26	11	5	11	28	B. P. and G. S. J.	24	1·26	24	1·22	24	1·24		
,,	27	11	53	12	19	G. S. J. and B. P.	24	2·33	24	1·92	24	2·12		
,,	28	12	13	12	33	B. P. and G. S. J.	24	1·03	24	0·44	24	0·73		
MARCH	1	12	11	12	40	B. P.	24	1·92	24	1·80	24	1·86		
,,	3	11	47	12	14	B. P. and G. S. J.	24	0·49	24	0·25	24	0·37		
,,	4	11	44	12	13	G. S. J. and B. P.	24	0·20	24	0·82	24	0·51		
,,	5	11	40	12	3	B. P. and G. S. J.	24	0·87	24	0·91	24	0·89		
,,	7	10	50	11	14	B. P. and G. S. J.	24	0·63	24	0·13	24	0·38		
,,	8	11	46	12	12	G. S. J. and B. P.	23	59·76	23	59·72	23	59·74		
,,	10	11	18	11	47	B. P. and G. S. J.	24	0·08	24	0·30	24	0·19		
,,	11	11	43	12	11	G. S. J. and B. P.	24	0·32	23	59·84	24	0·08		
,,	12	11	29	12	0	B. P. and G. S. J.	24	0·02	23	59·96	23	59·99		
,,	13	11	54	12	24	G. S. J. and B. P.	23	59·00	23	59·77	23	59·38		
,,	14	11	6	11	30	B. P. and G. S. J.	23	59·93	23	59·33	23	59·63	24	0·47
,,	15	11	38	12	5	G. S. J. and B. P.	24	0·59	24	0·66	24	0·62		
,,	17	11	15	11	41	B. P. and G. S. J.	24	0·88	24	0·82	24	0·85		
,,	18	11	41	12	5	G. S. J. and B. P.	24	1·02	24	0·46	24	0·74		
,,	19	11	25	11	49	B. P. and G. S. J.	24	0·86	24	0·40	24	0·63		
,,	20	11	49	12	20	G. S. J. and B. P.	24	0·66	24	0·52	24	0·59		
,,	22	12	10	13	4	G. S. J. and B. P.	24	1·19	24	1·09	24	1·14		
,,	24	11	9	11	32	B. P. and G. S. J.	24	1·26	24	0·86	24	1·06		
,,	25	11	44	12	17	G. S. J. and B. P.	24	0·49	23	59·48	23	59·98		
,,	26	11	13	11	41	B. P. and G. S. J.	24	0·28	23	59·63	23	59·95		
,,	27	12	2	12	30	G. S. J. and B. P.	24	1·15	24	0·04	24	0·59		
,,	28	11	10	11	36	B. P. and G. S. J.	24	0·76	24	0·66	24	0·71		
,,	29	11	48	12	18	G. S. J. and B. P.	24	0·85	24	1·06	24	0·95		
,,	31	11	1	11	29	B. P. and G. S. J.	24	0·51	24	0·52	24	0·51		

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1913. Date.		Alibag Civil Time (0 to 24 hours) At commencement.		At conclusion.		Observers.	Face of Circle. East.		West.		Mean Inclination.		Monthly mean Inclination.	
		H.	m.	H.	m.		°	′	°	′	°	′	°	′
April	1	12	4	12	37	G. S. J. and B. P.	23	59·42	23	59·24	23	59·33		
,,	2	11	0	11	24	B. P. and G. S. J.	24	1·25	24	1·16	24	1·20		
,,	3	11	32	11	59	G. S. J. and B. P.	23	59·80	24	0·27	24	0·03		
,,	4	11	0	11	24	B. P. and G. S. J.	24	0·56	24	0·85	24	0·70		
,,	5	11	55	12	20	G. S. J. and B. P.	23	59·92	24	0·40	24	0·16		
,,	7	11	14	11	43	B. P. and G. S. J.	23	59·69	23	59·68	23	59·68		
,,	8	11	43	12	5	G. S. J. and B. P.	23	59·31	23	59·98	23	59·64		
,,	9	11	10	11	30	B. P. and G. S. J.	24	0·72	24	0·95	24	0·83		
,,	10	11	41	12	12	G. S. J. and B. P.	24	2·57	24	3·06	24	2·81		
,,	11	11	8	11	31	B. P. and G. S. J.	24	0·98	24	0·89	24	0·93		
,,	2	11	47	12	16	G. S. J. and B. P.	24	1·82	24	2·27	24	2·04		
,,	14	11	50	12	13	B. P. and G. S. J.	24	1·82	24	2·05	24	1·93		
,,	16	11	26	11	48	B. P. and G. S. J.	24	0·32	24	0·49	24	0·40	24	0·97
,,	17	11	44	12	10	G. S. J. and B. P.	24	1·74	24	2·35	24	2·04		
,,	18	11	17	11	38	B. P. and G. S. J.	24	1·09	24	1·00	24	1·04		
,,	19	11	40	12	6	G. S. J. and B. P.	24	1·35	24	1·54	24	1·44		
,,	21	11	10	11	34	B. P. and G. S. J.	24	0·59	24	1·08	24	0·83		
,,	22	11	29	12	0	G. S. J. and B. P.	24	1·00	24	1·38	24	1·19		
,,	23	11	21	11	50	G. S. J.	24	1·45	24	1·74	24	1·59		
,,	24	11	30	11	57	G. S. J. and B. P.	24	0·39	24	0·34	24	0·36		
,,	25	11	18	11	40	B. P. and G. S. J	24	1·32	24	1·38	24	1·35		
,,	26	11	38	12	4	G. S. J. and B. P.	24	0·23	24	1·22	24	0·72		
,,	28	11	17	11	41	B. P. and G. S. J.	24	1·51	24	1·71	24	1·61		
,,	29	11	45	12	10	G. S. J. and B. P.	24	1·38	24	1·62	24	1·50		
,,	30	11	16	11	35	B. P. and G, S. J.	24	0·83	24	1·02	24	0·92		
May	1	11	51	12	16	G. S. J. and B. P.	24	1·15	24	1·62	24	1·38		
,,	2	11	2	11	24	B. P. and G. S. J.	24	0·22	24	0·16	24	0·19		
,,	3	11	30	11	55	G. S. J. and B. P.	24	1·36	24	1·71	24	1·53		
,,	5	11	25	11	46	B. P. and G. S. J.	24	2·55	24	2·72	24	2·63		
,,	6	11	51	12	20	G. S. J. and B. P.	24	0·24	24	1·15	24	0·69		
,,	7	11	11	11	36	B. P. and G. S. J.	24	2·44	24	2·84	24	2·64		
,,	8	11	51	12	11	G. S. J. and B. P.	24	1·26	24	1·46	24	1·36		
,,	9	11	48	12	16	B. P. and G. S. J.	24	2·70	24	3·34	24	3·02		
,,	10	11	46	12	15	G. S. J. and B. P.	24	2·09	24	2·02	24	2·05		
,,	12	11	11	11	33	B. P. and G. S. J.	24	1·07	24	1·16	24	1·11		
,,	13	11	45	12	14	G. S. J. and B. P.	24	0·67	24	1·39	24	1·03		
,,	14	11	40	12	3	B. P. and G. S. J.	24	1·37	24	1·87	24	1·62	24	1·77
,,	15	11	39	12	7	G. S. J. and B. P.	24	1·04	24	1·65	24	1·34		
,,	16	11	10	11	30	B. P. and G. S. J.	24	2·04	24	2·81	24	2·42		
,,	17	11	53	12	21	G. S. J. and B. P.	24	2·68	24	2·86	24	2·77		
,,	19	11	38	11	59	B. P. and G. S. J.	24	2·13	24	2·08	24	2·10		
,,	20	11	51	12	16	G. S. J. and B. P.	24	2·13	24	2·08	24	2·10		
,,	21	11	9	11	48	G. S. J.	24	1·26	24	1·53	24	1·39		
,,	22	12	17	12	50	G. S. J.	24	2·30	24	2·45	24	2·37		
,,	23	11	50	12	11	B. P. and G. S. J.	24	0·76	24	0·80	24	0·78		
,,	24	11	59	12	24	G. S. J. and B. P.	24	0·34	24	1·16	24	0·75		
,,	26	11	17	11	38	B. P. and G. S. J.	24	2·52	24	2·13	24	2·32		
,,	27	11	47	12	15	G. S. J. and B. P.	24	1·27	24	1·15	24	1·21		
,,	28	11	9	11	32	B. P. and G. S. J.	24	2·04	24	1·77	24	1·90		
,,	29	11	46	12	27	G. S. J. and B. P.	24	3·57	24	3·35	24	3·46		
June	7	16	14	16	46	G. S. J. and B. P.	24	3·82	24	4·79	24	4·30		
,,	9	11	21	11	57	B. P. and G. S. J.	24	2·01	24	1·34	24	1·67		
,,	12	14	4	14	38	G. S. J. and B. P.	24	4·61	24	4·01	24	4·31		
,,	13	11	19	11	54	B. P. and G. S. J.	24	2·12	24	1·34	24	1·73		
,,	14	11	54	12	18	G. S. J. and B. P.	24	3·47	24	2·50	24	2·98		
,,	16	11	28	11	57	B. P. and G. S. J.	24	1·94	24	1·40	24	1·67		
,,	17	11	41	12	20	G. S. J. and B. P.	24	2·12	24	2·21	24	2·16		
,,	18	10	58	11	22	B. P. and G. S. J.	24	2·04	24	1·59	24	1·81		
,,	19	11	48	12	24	G. S. J. and B. P.	24	2·17	24	1·60	24	1·88		
,,	20	11	57	12	22	B. P. and G. S. J.	24	2·28	24	2·42	24	2·35	24	2·61
,,	21	11	41	12	12	G. S. J. and B. P.	24	2·34	24	2·65	24	2·49		
,,	23	11	35	12	2	B. P. and G. S. J.	24	3·86	24	2·90	24	3·38		
,,	24	11	56	12	25	G. S. J. and B. P.	24	2·34	24	2·57	24	2·45		
,,	25	11	38	12	0	B. P. and G. S. J.	24	2·20	24	2·54	24	2·37		
,,	26	13	20	14	1	G. S. J. and B. P.	24	5·03	24	4·83	24	4·93		
,,	27	11	13	11	34	B. P. and G. S. J.	24	3·04	24	2·49	24	2·76		
,,	28	12	21	12	52	G. S. J. and B. P.	24	1·76	24	1·65	24	1·70		
,,	30	11	12	11	41	B. P. and G. S. J.	24	2·25	24	1·68	24	1·96		

1913.		Alibag Civil Time (0 to 24 hours)				Observers.	Face of Circle.				Mean Inclination.		Monthly mean Inclination.	
Date.		At commencement.		At conclusion.			East.		West.					
		H.	m.	H.	m.		°	′	°	′	°	′	°	′
JULY	1	12	30	12	57	G. S. J. and B. P.	24	3·27	24	3·24	24	3·25		
,,	2	11	17	11	40	B. P and G. S. J.	24	3·19	24	2·89	24	3·04		
,,	3	11	39	12	8	G. S. J. and B. P.	24	2·84	24	2·88	24	2·86		
,,	4	11	34	11	53	B. P. and G. S. J.	24	2·45	24	2·01	24	2·23		
,,	5	11	38	12	10	G. S. J. and B. P.	24	3·94	24	3·11	24	3·52		
,,	7	11	6	11	34	B. P. and G. S. J.	24	2·69	24	2·12	24	2·40		
,,	8	11	49	12	21	G. S. J. and B. P.	24	2·56	24	2·61	24	2·58		
,,	9	10	33	10	55	B. P. and G. S. J.	24	3·07	24	2·83	24	2·95		
,,	10	11	47	12	18	G. S. J. and B. P.	24	2·84	24	2·76	24	2·80		
,,	11	11	27	11	54	B. P. and G. S. J.	24	2·81	24	2·52	24	2·66		
,,	12	11	40	12	12	G. S. J. and B. P.	24	1·37	24	2·05	24	1·71		
,,	14	10	50	11	11	B. P. and G. S. J.	24	4·57	24	4·24	24	4·40		
,,	15	11	44	12	10	G. S. J. and B. P.	24	2·08	24	2·40	24	2·24	24	2·90
,,	16	10	51	11	23	B. P. and G. S. J.	24	3·39	24	3·66	24	3·52		
,,	17	11	44	12	14	G. S. J. and B. P.	24	3·47	24	3·08	24	3·27		
,,	18	11	36	11	55	B. P. and G. S. J.	24	3·08	24	3·13	24	3·10		
,,	19	11	51	12	21	G. S. J. and B. P.	24	2·94	24	2·46	24	2·70		
,,	21	11	14	11	31	B. P. and G. S. J.	24	4·21	24	3·88	24	4·04		
,,	22	11	37	12	4	G. S. J. and B. P.	24	1·71	24	2·39	24	2·05		
,,	23	10	54	11	18	B. P. and G. S. J.	24	2·62	24	2·40	24	2·51		
,,	24	11	42	12	8	G. S. J. and B. P.	24	2·77	24	3·27	24	3·02		
,,	25	11	21	11	41	B. P. and G. S. J.	24	2·65	24	2·80	24	2·72		
,,	26	11	51	12	18	G. S. J. and B. P.	24	3·47	24	3·70	24	3·58		
,,	28	11	12	11	43	B. P. and G. S. J.	24	2·78	24	2·95	24	2·86		
,,	29	11	15	11	39	G. S. J. and B. P.	24	3·09	24	3·20	24	3·14		
,,	30	10	54	11	16	B. P. and G. S. J.	24	2·69	24	2·55	24	2·62		
,,	31	12	6	12	30	G. S. J. and B. P.	24	2·44	24	2·84	24	2·64		
AUG.	1	11	5	11	30	B. P. and G. S. J.	24	3·15	24	3·40	24	3·27		
,,	2	11	36	12	3	G. S. J. and B. P.	24	3·16	24	3·33	24	3·24		
,,	4	11	10	11	30	B. P. and G. S. J.	24	2·58	24	3·10	24	2·84		
,,	5	11	30	11	59	G. S. J. and B. P.	24	3·64	24	3·62	24	3·63		
,,	6	10	55	11	15	B. P. and G. S. J.	24	2·95	24	3·17	24	3·06		
,,	7	10	54	11	31	B. P.	24	3·67	24	3·68	24	3· 7		
,,	8	11	41	11	58	B. P. and G. S. J.	24	2·03	24	2·49	24	2·26		
,,	9	11	41	12	6	G. S. J. and B. P.	24	0·47	24	1·47	24	0·97		
,,	11	10	49	11	9	B. P. and G. S. J.	24	2·05	24	2·99	24	2·52		
,,	12	11	25	11	51	G. S. J. and B. P.	24	3·12	24	3·29	24	3·20		
,,	13	11	0	11	21	B. P. and G. S. J.	24	3·48	24	3·71	24	3·59		
,,	14	11	42	12	11	G. S. J. and B. P.	24	2·82	24	3·46	24	3·14		
,,	15	11	31	11	55	G. S. J.	24	3·31	24	3·19	24	3·25		
,,	18	10	49	11	8	B. P. and G. S. J.	24	3·17	24	3·31	24	3·24	24	2·95
,,	19	11	5	11	33	G. S. J. and B. P.	24	1·52	24	2·46	24	1·99		
,,	20	10	58	11	17	B. P. and G. S. J.	24	3·39	24	3·41	24	3·40		
,,	21	11	43	12	6	G. S. J. and B. P.	24	2·74	24	2·52	24	2·63		
,,	22	11	2	11	20	B. P. and G. S. J.	24	2·44	24	2·59	24	2·51		
,,	23	11	23	11	49	G. S. J. and B. P.	24	3·46	24	3·30	24	3·38		
,,	25	11	3	11	29	B. P. and G. S. J.	24	3·72	24	3·49	24	3·60		
,,	26	11	32	11	55	G. S. J. and B. P.	24	2·57	24	2·70	24	2·63		
,,	27	11	3	11	23	B. P. and G. S. J.	24	2·80	24	2·60	24	2·70		
,,	28	11	24	11	48	G. S. J. and B. P.	24	2·46	24	2·22	24	2·34		
,,	29	11	5	11	27	B. P. and G. S. J.	24	2·86	24	2·98	24	2·92		
,,	30	11	32	12	3	G. S. J. and B. P.	24	3·45	24	3·91	24	3·68		
SEPT.	1	12	12	12	39	B. P. and G. S. J.	24	3·70	24	3·97	24	3·83		
,,	2	11	41	12	11	G. S. J. and B. P.	24	3·67	24	4·02	24	3·84		
,,	3	11	28	11	51	B. P. and G. S. J.	24	3·49	24	3·33	24	3·41		
,,	5	10	50	11	15	B. P. and G. S. J.	24	1·59	24	1·04	24	1·31		
,,	6	11	29	11	49	G. S. J. and B. P.	24	1·54	24	1·61	24	1·57		
,,	8	11	26	11	46	B. P. and G. S. J.	24	1·86	24	2·32	24	2·09		
,,	9	11	32	11	59	G. S. J. and B. P.	24	4·52	24	4·21	24	4·36		
,,	10	10	56	11	17	B. P. and G. S. J.	24	4·01	24	3·73	24	3·87		
,,	11	11	35	12	3	G. S. J. and B. P.	24	3·91	24	4·22	24	4·06		
,,	12	12	10	12	38	B. P. and G. S. J.	24	3·47	24	3·74	24	3·60		
,,	13	11	35	12	8	G. S. J. and B. P.	24	2·47	24	2·90	24	2·68		
,,	15	11	7	11	31	B. P. and A.	24	3·99	24	4·55	24	4·27		
,,	16	11	51	12	18	A. and B. P.	24	3·80	24	3·10	24	3·45	24	3·31
,,	17	11	45	12	5	B. P. and A.	24	1·92	24	1·64	24	1·78		
,,	18	12	10	12	35	A. and B. P.	24	3·32	24	3·57	24	3·44		
,,	19	10	32	10	56	B. P. and A.	24	3·30	24	2·89	24	3·09		
,,	20	11	33	11	53	A. and B. P.	24	2·79	24	2·81	24	2·80		
,,	22	10	29	10	52	B. P. and A.	24	3·09	24	2·85	24	2·97		
,,	23	10	58	11	18	A. and B. P.	24	4·19	24	3·75	24	3·97		
,,	24	10	33	11	9	B. P. and A.	24	4·00	24	3·85	24	3·92		
,,	25	11	40	12	7	A. and B. P.	24	2·86	24	1·96	24	2·41		
,,	26	11	16	11	33	B. P. and A.	24	3·49	24	2·87	24	3·18		
,,	27	11	21	11	44	A. and B. P.	24	4·30	24	3·42	24	3·86		
,,	29	11	5	11	28	B. P. and A.	24	4·27	24	4·29	24	4·28		
,,	30	12	35	13	3	A. and B. P.	24	5·09	24	4·15	24	4·62		

1913. Date.	Alibag Civil Time (0 to 24 hours) At commencement.		At conclusion.		Observers.	Face of Circle. East.		West.		Mean Inclination.		Monthly mean Inclination.	
	H.	m.	H.	m.		°	′	°	′	°	′	°	′
Oct. 1	11	55	12	23	B. P. and A.	24	2·92	24	3·03	24	2·97		
„ 2	11	18	11	43	A. and B. P.	24	3·10	24	3·12	24	3·11		
„ 3	11	31	11	53	B. P. and A.	24	3·22	24	3·95	24	3·58		
„ 4	11	23	11	52	B. P. and A.	4	4·45	24	3·62	24	4·03		
„ 6	11	45	12	20	A.	24	4·44	24	4·62	24	4·53		
„ 7	12	50	13	24	B. P. and A.	24	4·89	24	4·62	24	4·75		
„ 8	11	13	11	32	B. P. and A.	24	3·63	24	3·68	24	3·65		
„ 10	11	26	11	51	B. P. and A.	24	4·20	24	3·32	24	3·76		
„ 11	11	9	11	26	A. and B. P.	24	4·64	24	3·68	24	4·16		
„ 13	11	50	12	7	B. P. and A.	24	3·76	24	3·01	24	3·38		
„ 14	11	7	11	27	A. and B. P.	24	4·04	24	3·94	24	3·99		
„ 15	11	42	11	59	B. P. and A.	24	4·20	24	4·70	24	4·45	24	3·90
„ 16	11	33	12	0	A. and B. P.	24	3·70	24	3·96	24	3·83		
„ 17	10	51	11	13	B. P. and A.	24	4·23	24	3·57	24	3·90		
„ 18	10	43	11	3	A. and B. P.	24	5·47	24	5·65	24	5·56		
„ 20	10	28	10	43	B. P. and A.	24	4·55	24	4·82	24	4·68		
„ 21	11	51	12	50	A. and B. P.	24	3·43	24	3·84	24	3·63		
„ 22	12	3	12	17	B. P. and A.	24	3·74	24	3·98	24	3·86		
„ 23	11	30	12	4	A.	24	3·80	24	2·93	24	3·36		
„ 24	11	21	11	49	B. P. and G. S. J.	24	2·20	24	2·81	24	2·50		
„ 25	11	29	11	56	G. S. J. and B. P.	24	4·32	24	5·08	24	4·70		
„ 27	11	12	11	35	B. P. and G. S. J.	24	4·05	24	3·65	24	3·85		
„ 29	11	17	11	44	B. P. and G. S. J.	24	4·06	24	3·72	24	3·89		
„ 31	12	39	13	0	B. P. and G. S. J.	24	3·91	24	3·24	24	3·57		
Nov. 1	11	45	12	14	G. S. J. and B. P.	24	5·47	24	4·97	24	5·22		
„ 3	11	3	11	29	B. P. and G. S. J.	24	5·08	24	4·03	24	4·55		
„ 4	11	34	12	11	G. S. J. and B. P.	24	3·47	24	3·84	24	3·65		
„ 5	11	37	12	1	B. P. and G. S. J.	24	2·84	24	3·12	24	2·98		
„ 6	11	40	12	22	G. S. J. and B. P.	24	2·46	24	3·15	24	2·80		
„ 7	12	3	12	26	B. P. and G. S. J.	24	3·77	24	4·41	24	4·09		
„ 8	11	49	12	21	G. S. J. and B. P.	24	4·58	24	4·45	24	4·51		
„ 10	11	34	12	0	B. P. and G. S. J.	24	4·95	24	5·22	24	5·08		
„ 11	12	50	13	18	G. S. J. and B. P.	24	5·37	24	6·25	24	5·81		
„ 12	11	44	12	8	B. P. and G. S. J.	24	4·74	24	4·43	24	4·58		
„ 13	11	42	12	8	G. S. J. and B. P.	24	3·84	24	4·03	24	3·93		
„ 14	11	39	12	0	B. P. and G. S. J.	24	5·27	24	5·41	24	5·34		
„ 15	11	33	11	57	G. S. J. and B. P.	24	5·33	24	5·36	24	5·34	24	4·96
„ 17	11	47	12	9	B. P. and G. S. J.	24	5·10	24	5·76	24	5·43		
„ 18	11	53	12	22	G. S. J. and B. P.	24	4·16	24	5·16	24	4·66		
„ 19	11	50	12	14	B. P. and G. S. J.	24	4·95	24	5·08	24	5·01		
„ 20	11	42	12	8	G. S. J. and B. P.	24	4·86	24	5·50	24	5·18		
„ 21	11	29	11	47	B. P. and G. S. J.	24	4·64	24	5·26	24	4·95		
„ 22	11	54	12	16	G. S. J. and B. P.	24	5·96	24	5·54	24	5·75		
„ 24	11	21	11	53	B. P. and G. S. J.	24	5·96	24	5·75	24	5·85		
„ 25	12	4	12	32	G. S. J. and B. P.	24	5·69	24	6·00	24	5·84		
„ 26	11	42	11	59	B. P. and G. S. J.	24	4·27	24	4·57	24	4·42		
„ 27	11	54	12	23	G. S. J. and B. P.	24	6·03	24	6·41	24	6·22		
„ 28	12	16	12	38	B. P. and G. S. J.	24	6·29	24	6·44	24	6·36		
„ 29	11	54	12	23	G. S. J. and B. P.	24	6·15	24	6·57	24	6·36		
Dec. 1	11	47	12	8	B. P. and G. S. J.	24	6·87	24	7·15	24	7·01		
„ 2	11	53	12	29	G. S. J. and B. P.	24	7·61	24	7·19	24	7·40		
„ 3	11	44	12	7	B. P. and G. S. J.	24	6·78	24	7·20	24	6·99		
„ 4	11	59	12	32	G. S. J. and B. P.	24	7·68	24	8·69	24	8·18		
„ 5	12	29	12	48	B. P. and G. S. J.	24	7·36	24	7·67	24	7·51		
„ 6	11	39	12	7	G. S. J. and B. P.	24	6·85	24	6·12	24	6·48		
„ 8	10	49	11	13	B. P. and G. S. J.	24	6·16	24	6·43	24	6·29		
„ 9	12	5	12	30	G. S. J. and B. P.	24	7·14	24	6·99	24	7·06		
„ 10	10	44	11	5	B. P. and G. S. J.	24	7·34	24	7·16	24	7·25		
„ 11	11	59	12	25	G. S. J. and B. P.	24	7·01	24	7·59	24	7·30		
„ 12	11	4	11	29	B. P. and G. S. J.	24	6·91	24	7·05	24	6·98		
„ 13	11	44	12	9	G. S. J. and B. P.	24	6·11	24	6·37	24	6·24		
„ 15	10	55	11	18	B. P. and G. S. J.	24	7·08	24	7·24	24	7·16	24	7·31
„ 16	11	48	12	13	G. S. J. and B. P.	24	7·45	24	7·68	24	7·56		
„ 17	11	17	11	36	B. P. and G. S. J.	24	6·41	24	6·20	24	6·30		
„ 18	11	44	12	9	G. S. J. and B. P.	24	6·71	24	6·53	24	6·62		
„ 19	11	52	12	22	G. S. J.	24	7·36	24	7·60	24	7·48		
„ 20	11	53	12	36	G. S. J.	24	7·38	24	7·95	24	7·66		
„ 22	11	55	12	26	B. P. and G. S. J.	24	6·11	24	6·92	24	6·51		
„ 23	12	7	12	34	G. S. J.	24	7·88	24	8·58	24	8·23		
„ 24	11	5	11	35	G. S. J.	24	7·41	24	8·31	24	7·86		
„ 26	12	0	12	25	B. P. and G. S. J.	24	7·94	24	7·91	24	7·92		
„ 27	11	57	12	21	G. S. J. and B. P.	24	8·31	24	8·89	24	8·60		
„ 29	11	45	12	2	B. P. and G. S. J.	24	6·72	24	6·74	24	6·73		
„ 30	14	17	14	45	G. S. J.	24	8·58	24	9·11	24	8·84		
„ 31	11	35	12	3	G. S. J.	24	7·74	24	8·03	24	7·88		
The mean *observed Inclination for the year 1913 =												24	2·62

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table IIIb.

OBSERVATIONS OF INCLINATION, 1913.

Taken with Dip Circle No. 160 (Cambridge Scientific Instrument Co.) and two 3¼ inch Needles Nos. 1/05 and 2/05 by Dover Charlton.

1913. Date.	Alibag Civil Time (0 to 24 hours) At commencement.	At conclusion.	Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.	A. West.	B. Face of Circle. East.	B. West.	Mean Dip.	Monthly Mean for each Needle.	*Monthly Mean.
	H. m.	H. m.			° ′	° ′	° ′	° ′	° ′	° ′	° ′
JAN. 4	14 2	14 43	G. S. J.	1/05	23 49·0	24 6·6	23 55·1	24 10·6	24 0·3	No. 1/05 23 59·8	23 58·9
„ 11	14 52	15 39	G. S. J.	2/05	23 47·9	24 2·3	23 53·6	24 13·2	23 59·2	No. 2/05 23 58·1	
„ 18	13 30	14 22	G. S. J.	1/05	23 46·8	24 6·5	23 56·5	24 7·5	23 59·3		
„ 25	11 25	12 12	G. S. J.	2/05	23 44·2	23 59·6	23 54·3	24 9·9	23 57·0		
FEB. 1	13 43	14 31	G. S. J.	1/05	23 51·0	24 1·7	23 59·8	24 3·0	23 58·9	No. 1/05 24 0·3	23 59·7
„ 8	13 22	14 4	G. S. J.	2/05	23 50·9	24 1·2	23 57·5	24 5·5	23 58·8	No. 2/05 23 58·9	
„ 15	13 20	14 4	G. S. J.	1/05	23 51·9	24 6·6	23 54·7	24 11·1	24 1·1		
„ 22	13 2	13 44	G. S. J.	2/05	23 45·5	24 5·6	23 50·0	24 15·2	23 59·1		
„ 28	13 22	14 10	G. S. J.	1/05	23 58·2	24 6·9	23 50·2	24 8·0	24 0·8		
MARCH 8	13 30	14 22	G. S. J.	2/05	23 53·2	24 7·4	23 56·7	24 3·2	24 0·1	No. 1/05 24 2·9	24 1·5
„ 15	13 20	14 8	G. S. J.	1/05	23 50·9	24 7·9	23 53·1	24 19·5	24 2·8	No. 2/05 24 0·1	
„ 22	13 44	14 30	G. S. J.	2/05	23 52·5	23 59·5	24 0·9	24 7·6	24 0·1		
„ 29	14 0	14 44	G. S. J.	1/05	23 49·0	24 8·2	23 59·1	24 15·9	24 3·0		
APRIL 5	13 18	14 8	G. S. J.	2/05	23 46·7	24 2·7	23 46·6	24 21·2	23 59·3	No. 1/05 24 2·2	24 1·2
„ 12	13 14	14 5	G. S. J.	1/05	23 46·6	24 10·4	23 59·6	24 11·6	24 2·0	No. 2/05 24 0·1	
„ 19	13 17	14 24	G. S. J.	2/05	23 56·0	23 57·7	23 55·9	24 14·5	24 1·0		
„ 26	13 16	14 1	G. S. J.	1/05	23 48·8	24 7·5	23 59·6	24 14·0	24 2·5		
MAY 3	12 50	13 42	G. S. J.	2/05	23 48·4	24 6·4	24 0·0	24 18·0	24 3·2	No. 1/05 24 3·2	24 3·3
„ 10	13 20	14 10	G. S. J.	1/05	23 54·9	24 12·9	24 3·0	24 9·0	24 4·9	No. 2/05 24 3·4	
„ 17	13 21	14 9	G. S. J.	2/05	23 49·7	24 7·1	24 2·5	24 18·5	24 4·4		
„ 24	13 15	14 1	G. S. J.	1/05	23 55·5	23 59·9	24 2·6	24 9·7	24 1·9		
„ 30	12 53	13 42	G. S. J.	2/05	23 50·1	24 6·0	23 59·0	24 15·5	24 2·6		
„ 31	14 57	15 42	G. S. J.	1/05	23 52·7	24 7·2	23 58·3	24 13·0	24 2·8		
JUNE 2	11 32	12 16	G. S. J.	2/05	23 52·8	24 7·6	24 2·2	24 18·5	24 5·3		
„ 3	12 47	13 37	G. S. J.	1/05	23 55·6	24 8·2	23 57·6	24 10·4	24 2·9	No. 1/05 24 2·9	24 3·0
„ 4	12 28	13 18	G. S. J.	2/05	23 55·1	24 7·0	23 58·5	24 17·2	24 4·4	No. 2/05 24 3·2	
„ 5	11 58	12 40	G. S. J.	1/05	23 51·0	24 13·1	23 56·6	24 14·9	24 3·9		
„ 6	12 16	12 59	G. S. J.	2/05	23 51·7	23 58·7	23 56·2	24 14·9	24 0·4		
„ 7	10 20	10 58	G. S. J.	1/05	23 52·6	24 8·1	23 55·0	24 13·1	24 2·2		
„ 10	13 2	13 44	G. S. J.	2/05	23 49·8	24 1·5	24 4·5	24 12·5	24 2·1		
„ 11	11 43	12 31	G. S. J.	1/05	23 51·4	24 4·8	24 0·7	24 13·3	24 2·5		
„ 14	13 21	14 2	G. S. J.	2/05	23 55·5	24 7·9	24 1·9	24 11·1	24 4·1		
„ 21	13 42	14 25	G. S. J.	1/05	23 50·9	24 9·5	23 56·4	24 15·0	24 2·9		
„ 28	13 42	14 26	G. S. J.	2/05	23 55·1	24 6·1	23 56·5	24 13·2	24 2·7		
JULY 5	13 27	14 20	G. S. J.	1/05	23 51·7	24 6·6	24 2·2	24 9·0	24 2·4	No. 1/05 24 2·7	24 2·4
„ 12	13 32	14 21	G. S. J.	2/05	23 52·2	23 57·0	24 4·4	24 7·7	24 0·3	No. 2/05 24 2·0	
„ 19	13 24	14 6	G. S. J.	1/05	23 59·9	23 59·9	24 4·6	24 8·0	24 3·1		
„ 26	13 18	14 2	G. S. J.	2/05	23 59·5	24 5·0	24 0·4	24 10·4	24 3·8		
AUG. 2	12 55	13 43	G. S. J.	1/05	23 59·1	24 8·9	24 1·6	24 8·4	24 4·5	No. 1/05 24 4·2	24 3·9
„ 9	13 35	14 19	G. S. J.	2/05	23 57·6	24 7·0	24 1·2	24 10·4	24 4·0	No. 2/05 24 3·6	
„ 23	13 53	14 44	G. S. J.	1/05	23 57·2	24 6·8	24 0·9	24 11·1	24 4·0		
„ 30	13 22	14 8	G. S. J.	2/05	23 52·5	24 2·5	24 1·5	24 16·2	24 3·2		
SEPT. 6	12 55	13 42	G. S. J.	1/05	23 50·6	24 8·6	24 2·9	24 11·6	24 3·4	No. 1/05 24 3·1	24 3·0
„ 13	13 21	14 8	G. S. J.	2/05	23 54·6	24 3·1	24 5·0	24 9·7	24 3·1	No. 2/05 24 2·8	
„ 20	12 43	13 25	A.	1/05	23 59·1	24 7·9	24 1·2	24 3·4	24 2·9		
„ 27	12 45	13 25	G. S. J.	2/05	23 58·7	23 58·0	24 1·7	24 12·0	24 2·6		

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

1913. Date.	Alibag Civil Time (0 to 24 hours) At commencement.	At conclusion.	Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.	A. West.	B. Face of Circle. East.	B. West.	Mean Dip.	Monthly Mean for each Needle.	*Monthly Mean.
	H. m.	H. m.			° ′	° ′	° ′	° ′	° ′	° ′	° ′
Oct. 4	12 10	12 56	G. S. J.	1/05	23 59·2	24 8·7	24 2·7	24 5·2	24 3·9	No. 1/05	24 3·5
„ 11	12 5	12 42	A.	2/05	23 52·5	24 7·0	23 57·5	24 12·0	24 2·2	24 3·9	
„ 18	11 20	11 53	A.	1/05	23 57·5	24 7·0	24 0·2	24 11·0	24 3·9	No. 2/05	
„ 25	12 54	13 43	G. S. J.	2/05	23 52·2	24 3·4	24 6·2	24 14·6	24 4·1	24 3·1	
Nov. 1	12 58	13 41	G. S. J.	1/05	23 58·7	24 2·0	24 8·0	24 11·8	24 5·1	No. 1/05	24 6·2
„ 8	13 43	14 34	G. S. J.	2/05	23 49·2	24 11·7	24 6·7	24 11·2	24 4·7	24 6·6	
„ 15	12 44	13 23	G. S. J.	1/05	23 58·6	24 10·7	24 5·7	24 8·9	24 6·0	No. 2/05	
„ 22	13 0	13 42	G. S. J.	2/05	23 55·6	24 11·9	24 7·9	24 10·2	24 6·4	24 5·5	
„ 29	13 2	13 43	G. S. J.	1/05	24 4·7	24 12·0	24 7·1	24 11·4	24 8·8		
Dec. 6	12 55	13 44	G. S. J.	2/05	23 57·9	24 12·6	24 4·6	24 12·5	24 6·9	No. 1/05	24 7·3
„ 13	12 40	13 23	G. S. J.	1/05	24 0·2	24 10·6	24 5·6	24 10·3	24 6·7	24 7·3	
„ 20	14 6	14 54	G. S. J.	2/05	24 3·6	24 13·1	24 1·2	24 13·1	24 7·7	No. 2/05	
„ 27	13 0	13 50	G. S. J.	1/05	23 59·3	24 6·5	24 3·6	24 22·2	24 7·9	24 7·3	

The mean Dip for the year ... { With Needle No. 1/05 = 24 3·3
With Needle No. 2/05 = 24 2·3

The Mean observed Dip for the year 1913. = 24 2·8

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

Absolute Magnetical Observations, Alibag—Table Ia.

Observations of Vibration and Deflection, taken with Magnetometer No. 7 (T. Cooke and Sons) for the determination of Absolute Horizontal Force.

1914.

1914. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	Angle of Deflection of Magnet marked 7. Distance. 30·0 cms.	Angle of Deflection of Magnet marked 7. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	Values of H. From Deflection at distance. 22·5 cms. ($H_{30\cdot0}$).	Values of H. Difference. $H_{22\cdot5}-H_{30\cdot0}$	Values of H. Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
JAN. 7	13 20	2·7070	1·50	27·1	−2·1	8·488	84·22	26 37 12	10 49 49	27·2	8·410	84·22	G. S. J.	938·12	0·36881	0·36877	+·00004	0·36879	
„ „	15 5	2·7072	1·51	27·6	„	8·334	84·22	26 37 5	10 49 40	27·6	8·327	84·22	G. S. J.	938·19	·36881	·36880	+·00001	·36880	
„ 15	13 42	2·7061	1·51	26·9	−1·4	8·871	83·80	26 36 36	10 49 32	26·7	8·858	83·80	G. S. J.	938·10	·36903	·36901	+·00002	·36902	
„ „	15 27	2·7063	1·48	27·0	„	8·646	83·80	26 36 15	10 49 27	26·9	8·750	83·80	G. S. J.	938·02	·36903	·36899	+·00004	·36901	
„ 21	10 46	2·7058	1·49	26·2	−2·2	8·802	83·85	26 36 21	10 49 24	27·0	8·928	83·85	G. S. J.	938·02	·36900	·36899	+·00001	·36899	0·368990
„ „	12 36	2·7062	1·48	27·4	„	8·875	83·85	26 35 41	10 49 12	27·4	8·921	83·85	G. S. J.	938·08	·36910	·36906	+·00004	·36908	
„ 28	12 55	2·7058	1·49	27·0	−2·4	9·007	83·70	26 35 52	10 49 17	27·0	8·887	83·70	A.	938·10	·36913	·36910	+·00003	·36911	
„ „	14 14	2·7055	1·51	27·1	„	8·823	83·70	26 36 2	10 49 20	27·2	8·835	83·70	A.	938·30	·36914	·36911	+·00003	·36912	
FEB. 4	12 50	2·7060	1·50	26·8	−2·4	8·703	83·50	26 37 18	10 49 45	26·7	8·565	83·50	G. S. J.	938·27	·36896	·36895	+·00001	·36895	
„ „	15 19	2·7065	1·50	26·8	„	8·466	83·50	26 37 27	10 49 53	26·7	8·446	83·50	G. S. J.	938·17	·36888	·36884	+·00004	·36886	
„ 11	12 32	2·7055	1·50	26·7	−2·3	8·916	83·40	26 36 15	10 49 25	26·9	8·822	83·40	G. S. J.	938·21	·36911	·36909	+·00002	·36910	
„ „	15 8	2·7070	1·49	27·0	„	8·448	83·40	26 36 49	10 49 37	27·0	8·532	83·40	G. S. J.	937·93	·36887	·36884	+·00003	·36885	
„ 18	13 49	2·7050	1·50	24·9	−2·4	8·755	83·10	26 38 32	10 50 24	24·8	8·651	83·10	G. S. J.	938·17	·36897	·36891	+·00006	·36894	·368947
„ „	15 24	2·7056	1·51	25·0	„	8·638	83·10	26 38 22	10 50 10	24·9	8·652	83·10	G. S. J.	937·91	·36891	·36889	+·00002	·36890	
„ 25	13 42	2·7059	1·50	26·7	−2·4	8·922	83·05	26 36 32	10 49 32	26·5	8·855	83·05	G. S. J.	938·08	·36906	·36904	+·00002	·36905	
„ „	15 22	2·7065	1·51	26·7	−2·4	8·590	83·05	26 36 47	10 49 39	26·6	8·712	83·05	G. S. J.	937·95	·36895	·36891	+·00004	·36893	
MARCH 4	12 58	2·7063	1·50	26·8	−2·1	8·619	83·20	26 36 30	10 49 35	27·0	8·541	83·20	G. S. J.	938·06	·36898	·36893	+·00005	·36895	
„ „	14 56	2·7075	1·50	27·4	„	8·216	83·20	26 37 0	10 49 42	27·3	8·327	83·20	G. S. J.	937·97	·36877	·36875	+·00002	·36876	
„ 12	13 40	2·7058	1·48	26·5	−2·4	8·646	83·60	26 37 40	10 49 59	26·4	8·342	83·60	G. S. J.	938·34	·36894	·36890	+·00004	·36892	
„ „	15 17	2·7067	1·50	26·8	„	8·339	83·62	26 37 32	10 49 56	26·7	8·297	83·62	G. S. J.	938·14	·36884	·36881	+·00003	·36882	
„ 18	12 54	2·7066	1·50	26·9	−2·5	8·537	83·75	26 36 45	10 49 36	27·0	8·411	83·75	G. S. J.	938·04	·36893	·36890	+·00003	·36891	·368857
„ „	15 15	2·7076	1·49	27·5	„	8·152	83·75	26 37 3	10 49 44	27·2	8·210	83·75	G. S. J.	937·95	·36878	·36875	+·00003	·36876	
„ 25	13 20	2·7061	1·48	27·3	−2·6	8·654	83·80	26 36 10	10 49 25	27·6	8·495	83·80	G. S. J.	938·30	·36903	·36899	+·00004	·36901	
„ „	15 23	2·7082	1·48	28·0	„	8·086	83·80	26 36 36	10 49 30	27·8	8·252	83·80	G. S. J.	937·86	·36874	·36872	+·00002	·36873	

* The monthly and annual mean corrected for diurnal variation appear in Table VIII.

1914. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Effect of 90° Torsion.	Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	30·0 cms.	Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	22·5 cms. ($H_{30\cdot0}$).	Difference. $H_{22\cdot5}-H_{30\cdot0}$	Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
April 1	12 40	2·7080	1·47	29·0	−2·4	8·688	84·30	26 34 41	10 48 47	29·0	8·525	84·30	G. S. J.	937·91	0·36895	0·36894	+·00001	0·36894	
„ „	15 11	2·7084	1·49	29·1	„	8·002	84·30	26 35 5	10 48 55	29·1	8·335	84·30	G. S. J.	937·91	·36885	·36884	+·00001	·36884	
„ 8	13 8	2·7101	1·49	29·1	−2·6	7·215	84·55	26 37 12	10 49 46	29·2	7·113	84·55	G. S. J.	937·91	·36837	·36836	+·00001	·36836	
„ „	15 18	2·7094	1·48	29·0	„	7·343	84·50	26 36 48	10 49 40	29·3	7·290	84·50	G. S. J.	938·10	·36851	·36847	+·00004	·36849	
„ 15	12 43	2·7072	1·48	28·9	−2·5	8·812	85·00	26 35 15	10 49 2	28·1	8·513	85·00	G. S. J.	938·12	·36907	·36905	+·00002	·36906	
„ „	15 23	2·7076	1·48	28·2	„	8·132	85·00	26 35 47	10 49 16	28·3	8·210	85·00	G. S. J.	938·04	·36888	·36885	+·00003	·36886	·0·368848
„ 22	12 55	2·7083	1·49	30·4	−2·4	8·607	85·70	26 33 4	10 48 17	30·4	8·433	85·70	G. S. J.	938·02	·36907	·36902	+·00005	·36904	
„ „	15 22	2·7098	1·47	30·9	„	7·938	85·70	26 33 40	10 48 26	30·8	8·033	85·70	G. S. J.	937·86	·36881	·36878	+·00003	·36879	
„ 29	13 9	2·7078	1·48	30·0	−2·7	8·573	86·50	26 32 42	10 48 3	30·2	8·464	86·50	G. S. J.	937·93	·36916	·36914	+·00002	·36915	
„ „	15 27	2·7091	1·48	31·0	„	7·976	86·52	26 33 7	10 48 15	30·9	8·090	86·52	G. S. J.	938·02	·36897	·36894	+·00003	·36895	
May 6	12 39	2·7077	1·47	31·1	−2·3	8·924	87·25	26 31 16	10 47 32	31·2	8·742	87·25	G. S. J.	938·08	·36933	·36930	+·00003	·36931	
„ „	15 21	2·7096	1·48	31·7	„	8·000	87·25	26 32 22	10 47 57	31·7	8·083	87·25	G. S. J.	937·95	·36897	·36894	+·00003	·36895	
„ 13	12 29	2·7089	1·48	31·6	−2·2	8·391	87·90	26 31 17	10 47 36	31·3	8·377	87·90	G. S. J.	937·82	·36922	·36916	+·00006	·36919	
„ „	15 28	2·7105	1·50	31·4	„	7·732	87·90	26 32 8	10 47 57	31·8	7·896	87·90	G. S. J.	937·56	·36883	·36878	+·00005	·36880	
„ 20	12 49	2·7095	1·48	31·1	−2·3	7·815	88·92	26 33 0	10 48 11	31·0	7·747	88·92	G. S. J.	937·86	·36893	·36889	+·00004	·36891	·369000
„ „	15 25	2·7098	1·48	31·1	„	7·648	88·92	26 33 5	10 48 17	31·2	7·670	88·92	G. S. J.	937·86	·36885	·36881	+·00004	·36883	
„ 27	13 14	2·7091	1·46	31·8	−2·5	8·141	89·50	26 31 16	10 47 33	31·9	7·967	89·50	G. S. J.	937·93	·36916	·36911	+·00005	·36913	
„ „	15 18	2·7105	1·47	32·3	„	7·442	89·50	26 31 52	10 47 53	32·1	7·662	89·50	G. S. J.	937·80	·36892	·36885	+·00007	·36888	
June 3	12 37	2·7112	1·48	32·3	−2·5	7·521	90·10	26 31 59	10 47 47	32·1	7·459	90·10	G. S. J.	937·54	·36882	·36879	+·00003	·36880	
„ „	16 15	2·7112	1·48	32·8	„	7·266	90·07	26 31 57	10 47 43	32·7	7·231	90·07	G. S. J.	937·76	·36881	·36879	+·00002	·36880	
„ 10	13 29	2·7093	1·49	32·2	−2·5	8·001	90·05	26 31 3	10 47 22	32·4	7·920	90·05	G. S. J.	937·95	·36912	·36911	+·00001	·36911	
„ „	15 5	2·7106	1·47	32·4	„	7·621	90·05	26 31 25	10 47 35	32·4	7·780	90·05	G. S. J.	937·69	·36893	·36890	+·00003	·36891	
„ 17	12 24	2·7074	1·48	29·6	−2·3	8·105	90·40	26 32 48	10 48 7	30·0	8·025	90·40	G. S. J.	937·99	·36919	·36916	+·00003	·36917	·368934
„ „	15 23	2·7086	1·49	29·8	„	7·405	90·40	26 34 17	10 48 37	29·7	7·533	90·40	G. S. J.	937·93	·36892	·36891	+·00001	·36891	
„ 24	13 24	2·7083	1·47	29·1	−2·2	7·929	89·55	26 34 4	10 48 32	29·5	7·777	89·55	G. S. J.	937·76	·36893	·36892	+·00001	·36892	
„ „	15 24	2·7093	1·48	29·9	„	7·543	89·55	26 33 54	10 48 36	29·7	7·634	89·55	G. S. J.	937·63	·36887	·36882	+·00005	·36884	
July 1	12 58	2·7087	1·48	30·2	−2·1	7·910	88·45	26 33 0	10 48 11	30·5	7·877	88·45	G. S. J.	937·82	·36900	·36897	+·00003	·36898	
„ „	15 32	2·7095	1·49	30·9	„	7·601	88·42	26 33 12	10 48 7	30·8	7·717	88·42	G. S. J.	937·78	·36890	·36891	−·00001	·36890	
„ 8	13 28	2·7074	1·48	29·8	−2·1	8·317	87·80	26 33 4	10 48 4	29·8	8·237	87·80	G. S. J.	938·02	·36920	·36921	−·00001	·36920	
„ „	15 25	2·7088	1·48	29·8	„	7·812	87·80	26 33 38	10 48 21	29·7	8·016	87·80	G. S. J.	937·67	·36895	·36894	+·00001	·36894	
„ 15	12 48	2·7074	1·48	29·7	−2·0	8·343	87·40	26 33 8	10 48 12	29·8	8·241	87·40	G. S. J.	938·04	·36918	·36916	+·00002	·36917	
„ „	15 17	2·7087	1·48	30·1	„	7·861	87·40	26 33 12	10 48 16	30·3	7·964	87·40	G. S. J.	937·82	·36899	·36896	+·00003	·36897	·369056
„ 22	13 13	2·7064	1·45	28·6	−2·1	8·598	86·67	26 33 45	10 48 25	28·8	8·465	86·67	G. S. J.	938·08	·36926	·36924	+·00002	·36925	
„ „	15 19	2·7079	1·48	28·9	„	7·960	86·70	26 34 29	10 48 41	28·7	8·109	86·70	G. S. J.	937·80	·36900	·36899	+·00001	·36899	
„ 29	12 37	2·7054	1·47	27·0	−1·8	8·768	85·70	26 34 45	10 48 47	27·2	8·703	85·70	G. S. J.	937·97	·36928	·36928	·00000	·36928	
„ „	15 24	2·7075	1·47	27·5	„	7·744	85·75	26 35 46	10 49 10	27·7	8·136	85·75	G. S. J.	937·73	·36888	·36888	·00000	·36888	

Aug.	4	12	39	2·7075	1·48	27·6	−2·2	7·823	85·10	26	36	52	10	49	30	27·8	7·596	85·10	G. S. J.	938·06	·36877	·36878	−·00001	·36877	
„	„	15	17	2·7084	1·48	27·8	„	7·288	85·10	26	37	19	10	49	47	27·8	7·314	85·10	G. S. J.	937·97	·36862	·36860	+·00002	·36861	
„	12	13	40	2·7070	1·47	28·4	−1·9	8·353	85·12	26	34	48	10	48	47	28·6	8·138	85·12	G. S. J.	938·04	·36905	·36905	·00000	·36905	
„	„	15	27	2·7084	1·47	28·9	„	7·845	85·10	26	35	3	10	48	54	28·7	7·911	85·10	G. S. J.	937·78	·36888	·36887	+·00001	·36887	
„	19	13	28	2·7070	1·49	28·3	−1·2	8·371	85·52	26	34	53	10	48	50	28·1	8·244	85·52	G. S. J.	937·93	·36908	·36907	+·00001	·36907	·368879
„	„	15	29	2·7076	1·48	28·0	„	7·681	85·50	26	35	45	10	49	12	28·0	7·878	85·50	G. S. J.	937·89	·36890	·36888	+·00002	·36889	
„	26	13	4	2·7077	1·48	28·6	−2·0	8·217	85·32	26	34	44	10	48	47	28·8	8·130	85·32	G. S. J.	937·89	·36898	·36896	+·00002	·36897	
„	„	15	23	2·7089	1·48	29·2	„	7·585	85·35	26	35	2	10	48	50	29·1	7·819	85·35	G. S. J.	937·73	·36880	·36881	−·00001	·36880	
Sept.	2	13	33	2·7083	1·47	30·0	−2·1	8·046	85·80	26	33	45	10	48	20	30·1	7·988	85·80	G. S. J.	937·97	·36899	·36900	−·00001	·36899	
„	„	15	24	2·7096	1·48	30·4	„	7·695	85·80	26	33	42	10	48	19	30·3	7·845	85·80	G. S. J.	937·65	·36883	·36884	−·00001	·36883	
„	9	12	33	2·7080	1·48	29·4	−2·3	8·017	86·25	26	33	51	10	48	30	29·7	7·965	86·25	G. S. J.	937·93	·36900	·36898	+·00002	·36899	
„	„	15	24	2·7100	1·48	29·7	„	7·127	86·25	26	35	20	10	49	10	29·8	7·032	86·25	G. S. J.	937·80	·36860	·36854	+·00006	·36857	
„	16	13	48	2·7060	1·62	26·7	−1·7	8·296	85·90	26	36	44	10	49	37	26·9	7·851	85·90	G. S. J.	938·17	·36899	·36895	+·00004	·36897	
„	„	15	9	2·7070	1·63	27·0	„	7·882	85·87	26	36	32	10	49	31	27·0	7·771	85·87	G. S. J.	937·84	·36888	·36886	+·00002	·36887	·368807
„	23	12	41	2·7082	1·60	28·9	+0·2	7·962	86·00	26	35	1	10	48	55	29·0	7·817	86·00	G. S. J.	937·90	·36888	·36886	+·00002	·36887	
„	„	15	16	2·7090	1·63	29·2	„	7·205	86·00	26	35	18	10	49	1	29·1	7·505	86·00	G. S. J.	937·80	·36876	·36874	+·00002	·36875	
„	30	12	51	2·7099	1·65	30·3	−1·3	7·362	86·55	26	34	39	10	48	45	30·3	7·262	86·55	G. S. J.	937·80	·36868	·36867	+·00001	·36867	
„	„	14	53	2·7105	1·64	30·5	„	6·915	86·55	26	34	57	10	48	51	30·5	7·002	86·55	G. S. J.	937·76	·36857	·36856	+·00001	·36856	
Oct.	7	12	58	2·7086	1·63	30·3	−1·0	7·783	87·32	26	33	36	10	48	24	30·3	7·605	87·32	G. S. J.	937·99	·36897	·36894	+·00003	·36895	
„	„	14	58	2·7099	1·64	30·3	„	7·097	87·35	26	34	23	10	48	37	30·4	7·229	87·35	G. S. J.	937·73	·36870	·36870	·00000	·36870	
„	14	13	0	2·7090	1·68	31·0	−1·5	7·902	88·05	26	32	21	10	47	55	31·1	7·748	88·05	G. S. J.	937·84	·36904	·36901	+·00003	·36902	
„	„	14	54	2·7098	1·67	31·3	„	7·229	88·05	26	32	58	10	48	4	31·2	7·402	88·05	G. S. J.	937·80	·36888	·36888	·00000	·36888	
„	21	12	53	2·7097	1·63	31·0	−1·2	7·130	88·70	26	33	37	10	48	24	31·0	7·097	88·70	G. S. J.	937·93	·36882	·36879	+·00003	·36880	·368756
„	„	14	55	2·7102	1·63	31·5	„	7·138	88·70	26	33	16	10	48	16	31·3	7·138	88·70	G. S. J.	937·84	·36881	·36878	+·00003	·36879	
„	28	12	58	2·7105	1·64	30·0	−1·3	6·487	88·55	26	35	26	10	49	1	30·3	6·553	88·55	G. S. J.	937·73	·36849	·36849	·00000	·36849	
„	„	14	51	2·7114	1·64	30·8	„	6·310	88·55	26	35	25	10	49	4	30·5	6·512	88·55	G. S. J.	937·67	·36843	·36841	+·00002	·36842	
Nov.	4	12	38	2·7095	1·64	31·0	−1·1	7·282	88·70	26	33	21	10	48	20	31·3	6·969	88·70	G. S. J.	937·99	·36884	·36881	+·00003	·36882	
„	„	14	54	2·7120	1·65	31·0	„	6·156	88·70	26	34	51	10	48	50	31·0	6·478	88·70	G. S. J.	937·45	·36837	·36836	+·00001	·36836	
„	11	12	53	2·7091	1·64	30·0	−0·7	7·331	88·80	26	33	55	10	48	30	30·2	7·121	88·80	G. S. J.	937·84	·36887	·36884	+·00003	·36885	
„	„	15	21	2·7099	1·63	30·8	„	6·850	88·80	26	34	30	10	48	46	30·4	6·828	88·80	G. S. J.	937·95	·36874	·36871	+·00003	·36872	
„	18	13	21	2·7088	1·65	29·0	−0·8	7·195	88·60	26	34	42	10	48	50	29·3	7·178	88·60	G. S. J.	937·69	·36881	·36877	+·00004	·36879	·368792
„	„	14	57	2·7093	1·65	29·8	„	6·986	88·60	26	34	35	10	48	48	29·7	7·042	88·60	G. S. J.	937·78	·36878	·36875	+·00003	·36876	
„	25	13	30	2·7069	1·64	28·1	−1·1	7·873	88·05	26	34	33	10	48	46	28·2	7·755	88·05	G. S. J.	937·86	·36910	·36907	+·00003	·36908	
„	„	15	18	2·7078	1·64	28·7	„	7·533	88·07	26	34	51	10	48	50	28·5	7·601	88·07	G. S. J.	937·82	·36897	·36895	+·00002	·36896	
Dec.	2	12	36	2·7064	1·63	27·3	−0·8	7·816	87·50	26	35	12	10	49	2	27·7	7·725	87·50	G. S. J.	937·95	·36909	·36905	+·00004	·36907	
„	„	15	20	2·7077	1·63	28·3	„	7·342	87·50	26	35	45	10	49	12	28·0	7·420	87·50	G. S. J.	937·91	·36891	·36889	+·00002	·36890	
„	9	13	16	2·7068	1·63	27·1	−0·7	7·355	86·90	26	36	32	10	49	31	27·2	7·326	86·90	G. S. J.	937·99	·36891	·36888	+·00003	·36889	
„	„	15	20	2·7079	1·63	27·5	„	7·097	86·90	26	36	34	10	49	37	27·5	7·270	86·90	G. S. J.	937·82	·36877	·36871	+·00006	·36874	
„	16	13	52	2·7064	1·50	26·6	−0·4	7·712	86·00	26	36	7	10	49	22	26·7	7·771	86·00	G. S. J.	937·82	·36903	·36899	+·00004	·36901	
„	„	15	14	2·7068	1·50	27·0	„	7·736	86·00	26	36	5	10	49	17	26·9	7·780	86·00	G. S. J.	937·78	·36899	·36898	+·00001	·36898	·368911
„	23	13	30	2·7058	1·50	25·8	−0·9	7·787	85·10	26	37	0	10	49	45	26·0	7·672	85·10	G. S. J.	937·93	·36899	·36896	+·00003	·36897	
„	„	15	27	2·7062	1·50	26·5	„	7·626	85·10	26	37	5	10	49	49	26·1	7·626	85·10	G. S. J.	938·02	·36899	·36894	+·00005	·36896	
„	30	12	43	2·7061	1·49	25·4	−0·5	7·655	84·20	26	37	41	10	49	54	25·9	7·528	84·20	G. S. J.	937·89	·36887	·36885	+·00002	·36886	
„	„	15	21	2·7070	1·49	26·0	„	7·384	84·20	26	38	7	10	50	6	25·9	7·368	84·20	G. S. J.	937·82	·36874	·36872	+·00002	·36873	
																		Mean for the year		937·92			+·000025		

*The mean observed value of the Horizontal Force for the year 1914 = 0·368898

*The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table Ib.

Observations of Vibration and Deflection, taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.) for the determination of Absolute Horizontal Force.

1914.

1914. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection. Distance. 23 cms.	Angle of Deflection. Distance. 30 cms.	Angle of Deflection. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 23 cms. (H_{23}).	Values of H. From Deflection at distance. 30 cms. (H_{30}).	Values of H. Difference. $H_{23}-H_{30}$	Values of H. Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
JAN. 5	13 19	2·8762	2·45	26·4	−2·4	8·773	84·37	23 38 39	10 25 32	26·2	8·433	84·37	G. S. J.	910·84	0·36904	0·36901	+·00003	0·36902	
„ „	15 23	2·8775	2·42	26·1	„	8·391	84·40	23 38 37	10 25 37	25·9	8·436	84·40	G. S. J.	910·29	·36888	·36882	+·00006	·36885	
„ 12	14 0	2·8773	2·48	27·4	−2·2	8·990	83·80	23 36 39	10 24 55	27·3	8·771	83·80	G. S. J.	910·40	·36912	·36903	+·00009	·36907	
„ „	15 36	2·8781	2·49	27·6	„	8·701	83·80	23 36 45	10 24 43	27·6	8·723	83·80	G. S. J.	910·21	·36900	·36898	+·00002	·36899	0·368987
„ 19	11 0	2·8771	2·50	27·1	−1·4	8·762	83·95	23 36 36	10 24 41	28·0	8·817	83·95	G. S. J.	910·46	·36907	·36905	+·00002	·36906	
„ „	12 33	2·8775	2·50	27·8	„	8·783	83·95	23 36 5	10 24 35	28·0	8·785	83·95	G. S. J.	910·35	·36914	·36908	+·00006	·36911	
„ 26	13 34	2·8778	2·36	26·8	−2·4	8·660	83·80	23 37 19	10 25 10	27·4	8·538	83·80	G. S. J.	910·35	·36893	·36885	+·00008	·36889	
„ „	15 15	2·8784	2·34	27·6	„	8·427	83·80	23 36 47	10 24 55	27·8	8·483	83·80	G. S. J.	910·27	·36895	·36888	+·00007	·36891	
FEB. 2	13 2	2·8770	2·38	26·8	−2·3	8·969	83·50	23 37 21	10 24 59	26·6	8·903	83·50	A.	910·37	·36910	·36907	+·00003	·36908	
„ „	15 7	2·8768	2·36	26·8	„	8·618	83·50	23 37 7	10 25 10	26·7	8·705	83·50	A.	910·48	·36915	·36904	+·00011	·36909	
„ 9	12 46	2·8771	2·22	27·0	−2·3	9·139	83·40	23 37 13	10 25 2	26·8	8·873	83·40	G. S. J.	910·44	·36911	·36906	+·00005	·36908	
„ „	15 41	2·8783	2·22	27·1	„	8·560	83·40	23 37 41	10 24 57	27·1	8·616	83·40	G. S. J.	910·19	·36888	·36890	−·00002	·36889	·368980
„ 17	13 26	2·8781	2·25	27·0	−2·4	8·720	83·30	23 38 11	10 25 26	26·5	8·615	83·30	G. S. J.	910·33	·36888	·36883	+·00005	·36885	
„ „	15 31	2·8773	2·27	26·1	„	8·369	83·35	23 38 31	10 25 43	25·7	8·445	83·35	G. S. J.	910·37	·36894	·36884	+·00010	·36889	
MARCH 2	13 5	2·8782	2·23	27·1	−2·2	8·510	83·20	23 38 25	10 25 25	26·7	8·345	83·20	G. S. J.	910·42	·36884	·36882	+·00002	·36883	
„ „	16 15	2·8787	2·23	26·8	„	8·132	83·20	23 37 59	10 25 27	26·7	8·202	83·20	G. S. J.	910·14	·36881	·36872	+·00009	·36876	
„ 9	13 34	2·8771	2·22	27·7	−2·3	8·963	83·60	23 37 5	10 24 52	27·1	8·650	83·60	G. S. J.	910·58	·36917	·36915	+·00002	·36916	
„ „	15 24	2·8786	2·17	27·4	„	8·196	83·60	23 36 47	10 24 55	27·1	8·401	83·60	G. S. J.	910·02	·36899	·36891	+·00008	·36895	
„ 16	13 0	2·8779	2·22	27·0	−2·5	8·586	83·65	23 37 26	10 25 16	27·1	8·257	83·65	G. S. J.	910·35	·36895	·36886	+·00009	·36890	
„ „	15 29	2·8788	2·18	27·5	„	7·921	83·65	23 37 36	10 25 21	27·2	8·006	83·65	G. S. J.	910·27	·36886	·36876	+·00010	·36881	·368984
„ 23	13 15	2·8769	2·22	26·9	−2·7	8·988	83·75	23 37 45	10 25 21	26·0	8·772	83·75	G. S. J.	910·50	·36914	·36905	+·00009	·36909	
„ „	15 30	2·8772	2·21	26·3	„	8·482	83·70	23 37 14	10 25 7	26·1	8·555	83·70	G. S. J.	910·14	·36910	·36902	+·00008	·36906	
„ 30	13 24	2·8774	2·18	28·1	−2·4	9·018	84·20	23 36 30	10 24 37	27·6	8·810	84·20	G. S. J.	910·50	·36919	·36916	+·00003	·36917	
„ „	15 12	2·8781	2·15	27·8	„	8·468	84·20	23 35 59	10 24 30	27·6	8·681	84·20	G. S. J.	910·10	·36914	·36908	+·00006	·36911	

April	7	13	19	2·8795	2·15	28·3	−2·5	7·680	84·50	23	38	7	10	25	22	27·8	7·692	84·50	G. S. J.	910·44	·36871	·36868	+·00003	·36869	
„	„	16	22	2·8799	2·18	27·8	„	7·485	84·45	23	38	17	10	25	29	27·8	7·451	84·45	G. S. J.	910·29	·36860	·36855	+·00005	·36857	
„	13	12	52	2·8786	2·19	28·9	−2·6	8·491	84·87	23	36	46	10	24	44	28·1	8·298	84·87	G. S. J.	910·48	·36903	·36900	+·00003	·36901	
„	„	15	21	2·8795	2·23	28·5	„	7·921	84·85	23	36	16	10	24	45	27·9	8·022	84·85	G. S. J.	910·00	·36894	·36886	+·00008	·36890	
„	20	12	52	2·8787	2·19	29·6	−2·4	8·662	85·42	23	35	42	10	24	15	28·9	8·458	85·42	G. S. J.	910·44	·36912	·36911	+·00001	·36911	·368969
„	„	15	28	2·8798	2·23	29·3	„	8·008	85·40	23	35	57	10	24	33	28·9	8·140	85·40	G. S. J.	910·16	·36893	·36886	+·00007	·36889	
„	27	12	40	2·8780	2·16	30·3	−2·5	9·262	86·32	23	34	1	10	23	26	29·4	9·137	86·32	G. S. J.	910·37	·36945	·36946	−·00001	·36945	
„	„	15	28	2·8794	2·15	29·9	„	8·440	86·30	23	34	30	10	23	50	29·7	8·550	86·30	G. S. J.	910·14	·36915	·36911	+·00004	·36913	
May	4	13	5	2·8787	2·19	31·1	−2·4	8·648	87·27	23	33	35	10	23	22	30·9	8·488	87·27	G. S. J.	910·56	·36933	·36933	·00000	·36933	
„	„	15	22	2·8806	2·17	31·0	„	8·113	87·25	23	33	29	10	23	31	30·9	8·232	87·25	G. S. J.	910·00	·36911	·36904	+·00007	·36907	
„	11	12	56	2·8796	2·19	31·7	−2·3	8·708	87·60	23	32	50	10	23	6	31·2	8·653	87·60	G. S. J.	910·27	·36934	·36932	+·00002	·36933	
„	„	15	28	2·8807	2·19	31·0	„	8·184	87·60	23	33	2	10	23	16	31·1	8·308	87·60	G. S. J.	909·85	·36912	·36907	+·00005	·36909	
„	18	13	29	2·8810	2·22	31·8	−2·3	7·929	88·75	23	34	35	10	23	52	31·0	7·767	88·75	G. S. J.	910·35	·36898	·36894	+·00004	·36896	·369140
„	„	16	21	2·8812	2·20	31·1	„	7·556	88·70	23	34	21	10	23	51	30·9	7·671	88·70	G. S. J.	910·08	·36893	·36887	+·00006	·36890	
„	25	13	13	2·8805	2·31	32·5	−2·5	8·316	89·45	23	32	10	10	22	47	32·1	8·218	89·45	G. S. J.	910·12	·36928	·36927	+·00001	·36927	
„	„	15	31	2·8808	2·27	32·0	„	7·892	89·45	23	32	20	10	22	57	32·0	8·013	89·45	G. S. J.	910·02	·36919	·36915	+·00004	·36917	
June	1	12	42	2·8826	2·33	32·6	−2·4	7·165	89·95	23	34	20	10	23	55	32·2	7·013	89·95	G. S. J.	910·27	·36876	·36867	+·00009	·36871	
„	„	15	12	2·8829	2·30	32·0	„	6·726	89·97	23	34	29	10	24	5	31·7	6·838	89·97	G. S. J.	910·00	·36869	·36858	+·00011	·36863	
„	8	13	13	2·8806	2·32	31·8	−2·5	7·955	89·90	23	33	7	10	23	22	31·7	7·822	89·90	G. S. J.	910·23	·36914	·36906	+·00008	·36910	
„	„	15	3	2·8814	2·29	31·8	„	7·402	89·90	23	33	15	10	23	21	31·7	7·673	89·90	G. S. J.	910·00	·36902	·36897	+·00005	·36899	
„	15	13	17	2·8790	2·33	30·8	−2·2	8·208	90·65	23	33	20	10	23	20	30·9	8·067	90·65	G. S. J.	910·33	·36930	·36927	+·00003	·36928	
„	„	15	18	2·8806	2·28	30·9	„	7·538	90·67	23	33	42	10	23	29	30·8	7·823	90·67	G. S. J.	909·96	·36906	·36903	+·00003	·36904	·368984
„	22	13	14	2·8778	2·27	27·8	−2·4	7·852	89·60	23	36	35	10	24	47	27·9	7·729	89·60	G. S. J.	910·44	·36906	·36901	+·00005	·36903	
„	„	15	28	2·8793	2·18	28·0	„	7·272	89·60	23	36	13	10	24	46	28·0	7·478	89·60	G. S. J.	909·98	·36894	·36883	+·00011	·36888	
„	29	13	2	2·8786	2·15	29·8	−2·1	8·276	88·60	23	34	22	10	23	40	29·7	8·057	88·60	G. S. J.	910·29	·36925	·36925	·00000	·36925	
„	„	15	20	2·8809	2·13	29·8	„	7·580	88·62	23	34	16	10	23	48	29·8	7·820	88·62	G. S. J.	909·62	·36896	·36891	+·00005	·36893	
July	6	12	40	2·8803	2·10	29·9	−2·2	7·598	88·12	23	35	21	10	24	3	29·9	7·468	88·12	G. S. J.	910·12	·36891	·36891	·00000	·36891	
„	„	15	30	2·8816	2·13	29·9	„	7·078	88·10	23	35	5	10	24	17	29·7	7·290	88·10	G. S. J.	909·70	·36889	·36870	+·00010	·36875	
„	13	12	49	2·8796	2·13	29·8	−1·9	8·097	87·50	23	34	24	10	23	54	29·8	8·095	87·50	G. S. J.	910·10	·36911	·36905	+·00006	·36908	
„	„	15	17	2·8797	2·09	29·9	„	7·917	87·50	23	34	1	10	23	50	29·9	7·908	87·50	G. S. J.	910·02	·36915	·36905	+·00010	·36910	
„	20	13	7	2·8782	2·11	28·4	−2·1	7·942	86·75	23	36	0	10	24	40	27·9	7·900	86·75	G. S. J.	910·33	·36915	·36905	+·00010	·36910	·369011
„	„	15	19	2·8789	2·12	28·1	„	7·794	86·75	23	35	56	10	24	36	27·9	7·838	86·75	G. S. J.	910·02	·36904	·36895	+·00009	·36899	
„	27	13	13	2·8772	2·08	27·2	−1·9	8·313	85·80	23	36	32	10	24	42	27·2	8·173	85·80	G. S. J.	910·33	·36917	·36913	+·00004	·36915	
„	„	15	26	2·8783	2·08	27·5	„	7·759	85·80	23	36	26	10	24	45	27·4	7·896	85·80	G. S. J.	910·08	·36905	·36898	+·00007	·36901	
Aug.	3	13	2	2·8783	2·09	27·3	−2·1	8·102	85·12	23	37	16	10	25	0	27·7	7·638	85·12	G. S. J.	910·33	·36890	·36886	+·00004	·36888	
„	„	15	22	2·8801	2·08	27·5	„	6·862	85·12	23	38	4	10	25	30	27·5	7·066	85·12	G. S. J.	910·06	·36860	·36853	+·00007	·36856	
„	10	13	23	2·8785	2·04	28·3	−2·0	8·191	85·10	23	35	32	10	24	22	28·1	8·088	85·10	G. S. J.	910·08	·36915	·36907	+·00008	·36911	
„	„	15	22	2·8797	2·05	28·1	„	7·637	85·10	23	35	54	10	24	35	28·0	7·834	85·10	G. S. J.	909·77	·36894	·36885	+·00009	·36889	
„	17	12	31	2·8782	2·04	27·9	−1·8	8·253	85·52	23	36	6	10	24	19	27·7	8·239	85·52	G. S. J.	910·10	·36912	·36914	−·00002	·36913	·368896
„	„	15	20	2·8790	2·05	27·8	„	7·807	85·55	23	35	53	10	24	32	27·8	7·960	85·55	G. S. J.	909·87	·36902	·36895	+·00007	·36898	
„	31	12	29	2·8800	2·10	29·2	−2·2	7·722	85·62	23	35	41	10	24	22	29·1	7·610	85·62	G. S. J.	910·06	·36892	·36888	+·00004	·36890	
„	„	15	25	2·8811	2·10	29·4	„	7·418	85·60	23	35	35	10	24	30	29·4	7·354	85·60	G. S. J.	909·85	·36877	·36868	+·00009	·36872	
Sept.	7	13	36	2·8797	2·12	29·5	−2·3	7·910	86·25	23	34	48	10	24	3	29·3	7·795	86·25	G. S. J.	909·98	·36907	·36900	+·00007	·36903	
„	„	15	30	2·8804	2·13	29·3	„	7·570	86·20	23	34	16	10	23	51	29·3	7·660	86·20	G. S. J.	909·58	·36903	·36896	+·00007	·36899	
„	14	13	37	2·8790	1·57	27·6	−2·1	7·686	86·40	23	37	25	10	25	9	26·8	7·595	86·40	G. S. J.	910·14	·36894	·36888	+·00006	·36891	
„	„	15	24	2·8790	1·54	27·1	„	7·440	86·40	23	36	49	10	24	57	26·9	7·511	86·40	G. S. J.	909·91	·36896	·36888	+·00008	·36892	·368973
„	21	13	0	2·8790	1·55	28·4	0·0	8·066	85·95	23	35	47	10	24	17	28·0	8·044	85·95	G. S. J.	910·04	·36911	·36910	+·00001	·36910	
„	„	15	23	2·8796	1·54	27·5	„	7·693	85·95	23	36	32	10	24	52	27·2	7·762	85·95	G. S. J.	909·81	·36894	·36885	+·00009	·36889	

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

1914. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection. Distance. 23 cms.	Angle of Deflection. Distance. 30 cms.	Angle of Deflection. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 23 cms. (H_{23}).	Values of H. From Deflection at distance. 30 cms. (H_{30}).	Values of H. Difference. $H_{23}-H_{30}$	Values of H. Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
Oct. 5	13 28	2·8805	1·49	30·2	−1·1	7·648	87·05	23 34 47	10 24 2	30·0	7·349	87·05	G. S. J.	910·14	0·36900	0·36894	+·00006	0·36897	
„ „	15 27	2·8819	1·52	30·3	„	7·127	87·05	23 34 46	10 24 5	30·3	7·126	87·05	G. S. J.	909·79	·36881	·36873	+·00008	·36877	
„ 12	12 46	2·8813	1·58	30·9	−1·5	7·642	87·90	23 34 20	10 23 40	30·9	7·371	87·90	G. S. J.	910·02	·36894	·36893	+·00001	·36893	
„ „	15 27	2·8826	1·62	30·8	„	6·865	87·90	23 34 39	10 24 0	30·8	6·915	87·90	G. S. J.	909·75	·36873	·36866	+·00007	·36869	0·368992
„ 26	12 54	2·8788	1·65	29·9	−1·2	8·447	88·60	23 33 16	10 23 19	29·9	8·093	88·60	G. S. J.	910·08	·36939	·36935	+·00004	·36937	
„ „	15 25	2·8800	1·72	30·5	„	7·707	88·55	23 33 14	10 23 20	30·3	7·828	88·55	G. S. J.	909·91	·36924	·36920	+·00004	·36922	
Nov. 2	13 13	2·8820	1·79	30·6	−1·2	7·018	88·65	23 34 45	10 23 55	30·9	6·935	88·65	G. S. J.	909·87	·36877	·36873	+·00004	·36875	
„ „	15 21	2·8820	1·83	30·5	„	6·753	88·67	23 34 41	10 23 56	30·8	6·796	88·67	G. S. J.	909·83	·36876	·36871	+·00005	·36873	
„ 9	12 38	2·8796	1·83	30·4	−1·1	7·713	88·80	23 34 15	10 23 38	30·1	7·538	88·80	G. S. J.	910·21	·36918	·36917	+·00001	·36917	
„ „	15 22	2·8812	1·90	30·2	„	7·109	88·82	23 34 6	10 23 49	30·1	7·256	88·82	G. S. J.	909·70	·36897	·36889	+·00008	·36893	
„ 16	13 23	2·8803	1·96	29·5	−1·0	7·156	88·60	23 35 37	10 24 7	29·4	7·191	88·60	G. S. J.	910·00	·36889	·36891	−·00002	·36890	
„ „	15 33	2·8806	1·95	29·6	„	7·190	88·60	23 34 54	10 24 6	29·5	7·162	88·60	G. S. J.	909·85	·36894	·36888	+·00006	·36891	·368917
„ 23	13 10	2·8795	1·99	28·9	−0·9	7·365	88·20	23 35 36	10 24 2	28·9	7·212	88·20	G. S. J.	910·02	·36900	·36904	−·00004	·36902	
„ „	15 23	2·8805	1·92	28·9	„	7·123	88·22	23 35 11	10 24 21	29·1	7·133	88·22	G. S. J.	909·79	·36891	·36881	+·00010	·36886	
„ 30	13 36	2·8786	2·19	27·8	−0·6	7·608	87·90	23 36 7	10 24 28	27·8	7·452	87·90	G. S. J.	910·02	·36905	·36902	+·00003	·36903	
„ „	15 29	2·8796	2·12	27·8	„	7·210	87·90	23 36 20	10 24 42	27·7	7·277	87·90	G. S. J.	909·81	·36890	·36884	+·00006	·36887	
Dec. 7	12 59	2·8783	2·12	27·3	−0·9	7·648	87·02	23 35 55	10 24 39	27·3	7·600	87·02	G. S. J.	909·93	·36911	·36901	+·00010	·36906	
„ „	15 27	2·8790	1·96	27·6	„	7·418	87·00	23 35 41	10 24 30	27·5	7·435	87·00	G. S. J.	909·77	·36907	·36899	+·00008	·36903	
„ 14	13 35	2·8783	1·76	26·5	−0·6	7·576	86·15	23 37 36	10 25 6	26·2	7·440	86·15	G. S. J.	910·00	·36895	·36893	+·00002	·36894	
„ „	15 14	2·8790	1·74	26·4	„	7·313	86·15	23 36 57	10 25 6	26·3	7·372	86·15	G. S. J.	909·68	·36894	·36882	+·00012	·36888	
„ 21	13 9	2·8782	1·79	26·2	−0·6	7·633	85·50	23 37 22	10 25 3	26·4	7·393	85·50	G. S. J.	909·96	·36896	·36892	+·00004	·36894	·368911
„ „	15 21	2·8793	1·80	26·6	„	7·218	85·50	23 37 13	10 25 10	26·8	7·158	85·50	G. S. J.	909·79	·36883	·36873	+·00010	·36878	
„ 28	13 45	2·8774	1·86	25·0	−0·7	7·660	84·30	23 38 4	10 25 24	25·8	7·366	84·30	G. S. J.	910·06	·36892	·36886	+·00006	·36889	
„ „	15 27	2·8788	1·89	25·7	„	7·280	84·30	23 37 45	10 25 24	26·0	7·308	84·30	G. S. J.	909·75	·36882	·36872	+·00010	·36877	
											Mean for the year			910·12			+·000055		
											The mean *observed value of the Horizontal Force for the year 1914 =								0·368979

*The monthly and annual means corrected for diurnal variation appear in Table VI

Absolute Magnetical Observations, Alibag—Table IIa.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1914.

Taken with Magnetometer No. 7 (T. Cooke and Sons).

1914. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently. Erect.	Inverted.	Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Kennery Light House.	Torsion. Mean.	Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	*Observed Absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JAN. 2	13 30	55·6	..	85 15 20	222 23 20	0	..	G. S. J.	5·442	0 45 25		
„ 9	15 10	55·6	..	85 16 40	222 23 30	0	..	G. S. J.	5·560	0 46 35		
„ 16	14 0	55·6	..	85 16 55	222 23 40	0	..	G. S. J.	5·597	0 46 40		
„ 22	11 32	55·6	..	85 15 55	222 23 35	0	..	G. S. J.	5·482	0 45 45	5·496	0 45 52
„ 29	12 12	55·6	..	85 15 5	222 23 35	0	..	A.	5·397	0 44 55		
FEB. 5	13 1	55·6	..	85 15 5	222 23 25	0	..	G. S. J.	5·480	0 45 5		
„ 12	12 18	55·6	..	85 14 0	222 23 15	0	..	G. S. J.	5·405	0 44 10		
„ 19	13 0	55·6	..	85 14 40	222 23 30	0	..	G. S. J.	5·460	0 44 35	5·462	0 44 42
„ 27	13 11	55·6	..	85 14 55	222 23 20	0	..	G. S. J.	5·505	0 45 0		
MARCH 5	13 7	55·6	..	85 14 5	222 23 20	0	..	G. S. J.	5·435	0 44 10		
„ 13	12 20	55·6	..	85 14 40	222 23 15	0	..	G. S. J.	5·472	0 44 50		
„ 19	13 5	55·6	..	85 13 35	222 23 25	0	..	G. S. J.	5·372	0 43 35	5·377	0 43 39
„ 26	13 22	55·6	..	85 11 55	222 23 20	0	..	G. S. J.	5·230	0 42 0		
APR. 2	12 58	55·6	..	85 14 30	222 23 30	0	..	G. S. J.	5·492	0 44 25		
„ 9	13 0	55·6	..	85 13 5	222 23 25	0	..	G. S. J.	5·350	0 43 5		
„ 16	12 59	55·6	..	85 12 20	222 23 20	0	..	G. S. J.	5·262	0 42 25	5·369	0 43 20
„ 23	13 4	55·6	..	85 12 35	222 23 10	0	..	G. S. J.	5·330	0 42 50		
„ 30	13 14	55·6	..	85 13 45	222 23 15	0	..	G. S. J.	5·410	0 43 55		
MAY 7	12 51	55·6	..	85 13 10	222 23 15	0	..	G. S. J.	5·255	0 43 20		
„ 14	13 2	55·6	..	85 13 15	222 23 15	0	..	G. S. J.	5·280	0 43 25		
„ 21	13 45	55·6	..	85 13 30	222 23 15	0	..	G. S. J.	5·307	0 43 40	5·235	0 43 2
„ 28	14 4	55·6	..	85 11 35	222 23 15	0	..	G. S. J.	5·100	0 41 45		
JUNE 4	13 2	55·6	..	85 13 5	222 23 20	0	..	G. S. J.	5·267	0 43 10		
„ 11	12 56	55·6	..	85 12 15	222 23 20	0	..	G. S. J.	5·220	0 42 20		
„ 18	13 2	55·6	..	85 11 15	222 23 15	0	..	G. S. J.	†4·522	0 41 25	..	0 41 49
„ 25	12 38	55·6	..	85 10 10	222 23 15	0	..	G. S. J.	4·412	0 40 20		
JULY 2	13 11	55·6	..	85 12 15	222 23 30	0	..	G. S. J.	4·585	0 42 10		
„ 9	12 25	55·6	..	85 11 35	222 23 35	0	..	G. S. J.	4·527	0 41 25		
„ 16	12 29	55·6	..	85 11 15	222 23 35	0	..	G. S. J.	4·512	0 41 5	4·583	0 41 53
„ 24	12 45	55·6	..	85 11 35	222 23 30	0	..	G. S. J.	4·550	0 41 30		
„ 30	14 35	55·6	..	85 13 20	222 23 30	0	..	G. S. J.	4·742	0 43 15		
AUG. 6	13 22	55·6	..	85 12 15	222 23 40	0	..	G. S. J.	4·622	0 42 0		
„ 14	12 7	55·6	..	85 10 55	222 23 55	0	..	G. S. J.	4·462	0 40 25		
„ 20	12 25	55·6	..	85 11 40	222 24 0		..	G. S. J.	4·567	0 41 5	4·531	0 40 55
„ 27	12 34	55·6	..	85 10 50	222 24 5	0	..	G. S. J.	4·475	0 40 10		
SEPT. 3	12 22	55·6	..	85 11 45	222 24 10	0	..	G. S. J.	4·600	0 41 0		
„ 10	12 43	55·6	..	85 11 10	222 24 0	0	..	G. S. J.	4·565	0 40 35		
„ 17	12 35	55·6	..	85 12 20	222 23 55	0	..	G. S. J.	4·690	0 41 50	4·649	0 41 22
„ 24	13 4	55·6	..	85 12 45	222 24 5	0	..	G. S. J.	4·740	0 42 5		
OCT. 1	12 41	55·6	..	85 12 25	222 24 15	0	..	G. S. J.	4·722	0 41 35		
„ 8	13 8	55·6	..	85 12 40	222 24 20	0	..	G. S. J.	4·770	0 41 45		
„ 15	12 43	55·6	..	85 12 15	222 24 20	0	..	G. S. J.	4·727	0 41 20	4·760	0 41 37
„ 22	12 24	55·6	..	85 11 35	222 24 25	0	..	G. S. J.	4·670	0 40 35		
„ 29	12 44	55·6	..	85 13 45	222 24 20	0	..	G. S. J.	4·910	0 42 50		
NOV. 5	12 24	55·6	..	85 13 30	222 24 10	0	..	G. S. J.	4·890	0 42 45		
„ 12	12 48	55·6	..	85 13 30	222 23 55	0	..	G. S. J.	4·920	0 43 0		
„ 19	13 5	55·6	..	85 13 45	222 23 40	0	..	G. S. J.	4·955	0 43 30	4·910	0 42 56
„ 26	12 1	55·6	..	85 12 40	222 23 35	0	..	G. S. J.	4·877	0 42 30		
DEC. 3	13 7	55·6	..	85 13 10	222 23 15	0	..	G. S. J.	4·897	0 43 20		
„ 10	12 42	55·6	..	85 12 30	222 23 15	0	..	G. S. J.	4·847	0 42 40		
„ 17	13 3	55·6	..	85 12 45	222 23 15	0	..	G. S. J.	4·892	0 42 55	4·876	0 42 45
„ 24	13 0	55·6	..	85 12 15	222 23 10	0	..	G. S. J.	4·867	0 42 30		
„ 31	12 46	55·6	..	85 12 5	222 23 10	0	..	G. S. J.	4·875	0 42 20		

The mean *observed Declination for the year 1914=0° 42′ 49″

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

† Adjustment of the zero mirror of the Declination Magnetograph on the 13th June.

Absolute Magnetical Observations, Alibag—Table IIb.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1914.

Taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.)

1914. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently. Erect.	Inverted.	Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Kennery Light House.	Torsion. Mean.	Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	*Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JAN. 2	14 10	34·00	35·35	276 17 10	53 23 30	0	..	G. S. J.	5·491	0 45 48		
„ 9	15 42	33·90	35·30	276 16 55	53 22 20	0	..	G. S. J.	5·576	0 46 40		
„ 16	14 32	34·02	35·12	276 17 5	53 22 25	0	..	G. S. J.	5·632	0 47 2	5·529	0 46 8
„ 22	12 5	34·02	35·17	276 16 0	53 22 40	0	..	G. S. J.	5·490	0 45 40		
„ 29	12 38	34·00	35·20	276 16 0	53 22 45	0	..	A.	5·458	0 45 31		
„ 5	13 37	34·02	35·30	276 16 10	53 22 20	0	..	G. S. J.	5·552	0 46 2		
„ 12	12 50	33·95	35·30	276 14 25	53 22 0	0	..	G. S. J.	5·447	0 44 33	5·521	0 45 26
„ 19	14 6	33·95	35·35	276 16 15	53 22 40	0	..	G. S. J.	5·545	0 45 40		
„ 27	13 50	34·00	35·30	276 15 30	53 22 10	0	..	G. S. J.	5·539	0 45 31		
„ 5	15 14	34·00	35·30	276 15 45	53 21 40	15E	0·53	G. S. J.	5·569	0 46 6		
„ 13	12 51	33·90	35·80	276 14 35	53 22 0	0	..	G. S. J.	5·415	0 44 11	5·405	0 43 55
„ 19	13 28	33·95	35·80	276 13 40	53 22 5	0	..	G. S. J.	5·382	0 43 15		
„ 26	13 51	33·95	35·70	276 12 40	53 22 15	0	..	G. S. J.	5·256	0 42 10		
APRIL 2	13 42	34·00	35·70	276 15 10	53 22 20	0	..	G. S. J.	5·523	0 44 38		
„ 9	13 37	34·00	35·72	276 13 40	53 22 15	0	..	G. S. J.	5·372	0 43 11		
„ 16	13 25	34·02	35·77	276 13 30	53 22 25	0	..	G. S. J.	5·315	0 42 50	5·388	0 43 26
„ 23	13 40	33·97	35·85	276 13 30	53 22 25	0	..	G. S. J.	5·327	0 42 42		
„ 30	13 41	34·00	35·80	276 14 35	53 22 30	0	..	G. S. J.	5·405	0 43 47		
MAY 7	13 22	34·00	35·50	276 13 25	53 22 25	0	..	G. S. J.	5·293	0 42 59		
„ 14	13 44	34·00	35·67	276 14 0	53 22 40	0	..	G. S. J.	5·331	0 43 10	5·281	0 42 52
„ 21	14 46	34·00	35·57	276 14 20	52 22 45	0	..	G. S. J.	5·346	0 43 31		
„ 28	14 44	34·05	35·55	276 12 35	53 22 45	0	..	G. S. J.	5·153	0 41 49		
JUNE 4	13 33	34·02	35·75	276 13 30	53 22 35	0	..	G. S. J.	5·272	0 42 41		
„ 11	13 40	34·00	35·55	276 12 30	53 22 35	0	..	G. S. J.	5·232	0 41 52	..	0 41 51
„ 18	11 39	33·95	35·62	276 11 55	53 22 25	0	..	G. S. J.	†4·578	0 41 20		
„ 25	13 58	34·02	35·15	276 12 5	53 22 55	0	..	G. S. J.	4·592	0 41 31		
JULY 2	13 51	34·02	35·60	276 12 20	53 22 50	0	..	G. S. J.	4·571	0 41 24		
„ 9	13 18	34·02	35·50	276 12 35	53 22 50	0	..	G. S. J.	4·617	0 41 45		
„ 16	13 6	34·00	35·57	276 11 25	53 22 45	0	..	G. S. J.	4·535	0 40 36	4·599	0 41 22
„ 24	13 19	34·02	35·55	276 11 20	53 22 45	0	..	G. S. J.	4·532	0 40 33		
„ 30	15 1	33·90	35·77	276 12 15	53 21 20	0	..	G. S. J.	4·737	0 42 33		
AUG. 6	13 52	34·05	35·52	276 11 25	53 21 40	0	..	G. S. J.	4·658	0 41 46		
„ 14	12 49	34·00	35·60	276 9 10	53 21 40	0	..	G. S. J.	4·429	0 39 23	4·555	0 40 32
„ 20	12 59	33·95	35·70	276 10 40	53 21 25	0	..	G. S. J.	4·613	0 41 0		
„ 27	13 11	33·92	35·72	276 10 10	53 21 50	0	..	G. S. J.	4·522	0 40 2		
SEPT. 3	12 59	33·97	35·55	276 11 15	53 22 15	0	..	G. S. J.	4·640	0 40 54		
„ 10	13 13	34·00	35·62	276 10 50	53 22 10	0	..	G. S. J.	4·560	0 40 32	4·685	0 41 26
„ 17	13 22	34·15	35·62	276 11 55	53 21 55	0	..	G. S. J.	4·740	0 42 1		
„ 24	13 51	34·00	35·52	276 12 20	53 22 0	0	..	G. S. J.	4·800	0 42 18		
OCT. 1	13 25	34·05	35·70	276 11 50	53 21 50	0	..	G. S. J.	4·792	0 41 51		
„ 8	13 46	34·02	35·50	276 12 35	53 22 20	0	..	G. S. J.	4·830	0 42 15		
„ 15	13 16	34·02	35·65	276 11 45	53 22 5	0	..	G. S. J.	4·757	0 41 32	4·810	0 42 1
„ 22	12 59	34·20	35·22	276 11 15	53 22 5	0	..	G. S. J.	4·760	0 41 37		
„ 29	13 12	33·97	35·85	276 13 30	53 22 15	0	..	G. S. J.	4·910	0 42 52		
NOV. 5	13 4	34·05	35·80	276 13 10	53 21 55	0	..	G. S. J.	4·917	0 43 0		
„ 12	13 24	34·05	35·77	276 13 10	53 21 55	0	..	G. S. J.	4·920	0 43 1	4·917	0 42 51
„ 19	13 38	34·00	35·85	276 13 35	53 22 0	0	..	G. S. J.	4·965	0 43 15		
„ 26	12 38	33·97	35·60	276 12 10	53 21 55	0	..	G. S. J.	4·867	0 42 7		
DEC. 3	13 41	34·02	35·65	276 13 0	53 21 40	0	..	G. S. J.	4·915	0 43 12		
„ 10	13 27	34·00	35·85	276 12 10	53 21 35	10E	0·64	G. S. J.	4·808	0 42 7		
„ 17	13 40	33·95	35·72	276 12 40	53 21 25	0	..	G. S. J.	4·883	0 42 59	4·869	0 42 39
„ 24	13 32	33·97	35·65	276 11 45	53 21 15	0	..	G. S. J.	4·854	0 42 19		
„ 31	13 19	34·05	35·60	276 12 5	53 21 25	0	..	G. S. J.	4·886	0 42 37		

The mean *observed Declination for the year 1914 = 0° 42′ 52″

† Adjustment of the zero mirror of the Declination Magnetograph on the 13th June.

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

Absolute Magnetical Observations, Alibag—Table IIIa.

OBSERVATIONS OF INCLINATION, 1914.

Taken with Inductor No. 41 by Schulze and Galvanometer No. 200 by Plath.

1914. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	*Monthly Mean Inclination. °	′
JANY.	2	12	16	12	44	A. and G. S. J.	24	7·49	24	7·88	24	7·68		
,,	3	11	57	12	24	G. S. J. and A.	24	7·46	24	7·11	24	7·28		
,,	5	11	27	11	51	A. and G. S. J.	24	6·78	24	6·34	24	6·56		
,,	6	11	43	12	18	G. S. J. and A.	24	7·28	24	8·06	24	7·67		
,,	7	11	13	11	36	A. and G. S. J.	24	8·01	24	7·73	24	7·87		
,,	9	13	58	14	20	A. and G. S. J.	24	8·36	24	8·22	24	8·29		
,,	10	12	13	12	52	G.S.J.andM.D.K.	24	8·70	24	9·09	24	8·89		
,,	12	12	30	12	55	G.S.J. & M.D.K.	24	7·77	24	8·59	24	8·18		
,,	13	12	2	12	43	M.D.K. & G.S.J.	24	6·84	24	6·76	24	6·80		
,,	15	11	50	12	25	G. S. J.	24	7·75	24	8·03	24	7·89		
,,	16	12	11	13	27	G. S. J.	24	9·48	24	10·11	24	9·79		
,,	17	15	21	15	41	G. S. J. and G. P.	24	9·26	24	9·58	24	9·42		
,,	18	14	48	15	9	G. S. J. and G. P.	24	8·45	24	8·58	24	8·51	24	8·07
,,	19	14	39	15	3	G. S. J. and G. P.	24	9·55	24	10·01	24	9·78		
,,	20	14	36	14	54	G. S. J. and G. P.	24	8·22	24	8·64	24	8·43		
,,	21	15	39	16	5	G. S. J. and G. P.	24	9·76	24	9·63	24	9·69		
,,	22	10	43	11	2	G. S. J. and G. P.	24	7·16	24	7·42	24	7·29		
,,	23	11	59	12	44	G. P. and G. S. J.	24	9·18	24	9·02	24	9·10		
,,	24	11	39	12	19	G. P. and G. S. J.	24	8·10	24	8·91	24	8·50		
,,	26	11	33	11	56	G. S. J. and G. P.	24	8·01	24	9·05	24	8·53		
,,	27	11	36	12	7	G. P. and G. S. J.	24	7·27	24	7·84	24	7·55		
,,	28	11	13	11	52	G. P. and A.	24	7·66	24	7·67	24	7·66		
,,	29	11	29	11	49	A. and G. P.	24	6·36	24	7·26	24	6·81		
,,	30	12	7	12	44	G. P. and A.	24	7·06	24	6·50	24	6·78		
,,	31	11	31	11	43	A. and G. P.	24	6·54	24	6·93	24	6·73		
FEB.	2	11	44	12	10	G. P. and A.	24	6·68	24	7·44	24	7·06		
,,	3	11	8	11	20	A. and G. P.	24	6·66	24	7·08	24	6·87		
,,	4	11	17	11	44	G. P. and G. S. J.	24	7·17	24	6·95	24	7·06		
,,	5	11	29	11	53	G. S. J. and G. P.	24	7·82	24	7·72	24	7·77		
,,	6	11	15	11	36	G. P. and G. S. J.	24	7·70	24	8·46	24	8·08		
,,	7	11	25	11	48	G. S. J. and G. P.	24	8·86	24	8·98	24	8·92		
,,	9	11	3	11	22	G. P. and G. S. J.	24	7·30	24	6·91	24	7·10		
,,	10	11	48	12	16	G. S. J. and G. P.	24	7·40	24	7·47	24	7·43		
,,	11	11	17	11	40	G. P. and G. S. J.	24	7·87	24	8·38	24	8·12		
,,	12	11	26	11	46	G. S. J. and G. P.	24	7·02	24	6·93	24	6·97		
,,	13	11	26	11	48	G. P. and G. S. J.	24	7·56	24	7·53	24	7·54		
,,	14	11	35	11	56	G. S. J. and G. P.	24	7·53	24	8·53	24	8·03	24	7·83
,,	16	11	37	12	3	G. P. and G. S. J.	24	7·82	24	8·04	24	7·93		
,,	17	11	43	12	4	G. P. and G. S. J.	24	8·04	24	7·59	24	7·81		
,,	18	11	55	12	21	G. P. and G. S. J.	24	8·64	24	8·29	24	8·46		
,,	19	11	55	12	17	G. S. J. and G. P.	24	7·37	24	7·75	24	7·56		
,,	20	11	37	12	1	G. P. and G. S. J.	24	8·23	24	8·15	24	8·19		
,,	21	11	48	12	10	G. S. J. and G. P.	24	7·98	24	8·58	24	8·28		
,,	24	11	35	11	56	G. S. J. and G. P.	24	8·07	24	8·23	24	8·15		
,,	25	11	44	12	12	G. P. and G. S. J.	24	7·46	24	7·34	24	7·40		
,,	26	14	36	14	59	G. S. J. and G. P.	24	9·35	24	9·90	24	9·62		
,,	27	11	29	11	57	G. P. and G. S. J.	24	7·96	24	8·20	24	8·08		
,,	28	11	38	12	0	G. S. J. and G. P.	24	7·58	24	7·61	24	7·59		
MARCH	2	11	16	11	37	G. P. and G. S. J.	24	8·14	24	7·73	24	7·93		
,,	3	11	15	11	41	G. S. J. and G. P.	24	8·85	24	9·27	24	9·06		
,,	4	11	15	11	37	G. P. and G. S. J.	24	8·41	24	8·38	24	8·39		
,,	5	11	57	12	26	G. S. J. and G. P.	24	8·84	24	9·14	24	8·99		
,,	6	11	24	11	47	G. P. and G. S. J.	24	8·88	24	8·59	24	8·73		
,,	7	11	47	12	13	G. S. J. and G. P.	24	8·51	24	8·82	24	8·66		
,,	9	11	20	11	42	G. P. and G. S. J.	24	7·98	24	8·08	24	8·03		
,,	10	11	48	12	12	G. S. J. and G. P.	24	8·82	24	9·03	24	8·92		
,,	12	11	30	11	52	G. S. J. and G. P.	24	8·48	24	8·69	24	8·58		
,,	13	11	16	11	47	G. P. and G. S. J.	24	8·38	24	8·44	24	8·41		
,,	14	11	28	11	53	G. S. J. and G. P.	24	7·82	24	8·10	24	7·96		
,,	16	11	15	11	37	G. P. and G. S. J.	24	8·24	24	8·28	24	8·26		
,,	17	11	35	12	4	G. S. J. and G. P.	24	8·24	24	8·51	24	8·37	24	8·23
,,	18	11	12	11	34	G. P. and G. S. J.	24	8·39	24	9·14	24	8·76		
,,	19	11	38	12	4	G. S. J. and G. P.	24	7·36	24	7·70	24	7·53		
,,	20	11	16	11	37	G. P. and G. S. J.	24	8·85	24	8·51	24	8·68		
,,	21	12	5	12	28	G. S. J. and G. P.	24	7·66	24	7·99	24	7·82		
,,	23	11	22	11	43	G. P. and G. S. J.	24	7·93	24	8·33	24	8·13		
,,	24	11	34	11	59	G. S. J. and G. P.	24	7·61	24	7·46	24	7·53		
,,	25	11	22	11	52	G. P. and G. S. J.	24	8·80	24	8·19	24	8·49		
,,	26	12	2	12	24	G. S. J. and G. P.	24	7·14	24	7·33	24	7·23		
,,	27	11	12	11	33	G. P. and G. S. J.	24	7·82	24	8·09	24	7·95		
,,	28	11	56	12	21	G. S. J. and G. P.	24	7·90	24	7·84	24	7·87		
,,	30	11	18	11	36	G. P. and G. S. J.	24	7·75	24	7·68	24	7·71		
,,	31	11	15	11	37	G. S. J. and G. P.	24	7·38	24	7·92	24	7·65		

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1914. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	Monthly Mean Inclination. °	′
April	1	11	18	11	41	G. P. and G. S. J.	24	7·67	24	8·39	24	8·03		
,,	2	11	40	12	9	G. S. J. and G. P.	24	8·99	24	8·93	24	8·96		
,,	3	11	17	11	46	G. P. and G. S. J.	24	8·42	24	8·74	24	8·58		
,,	6	11	16	11	42	G. P. and G. S. J.	24	8·58	24	8·55	24	8·56		
,,	7	11	45	12	9	G. S. J. and G. P.	24	9·64	24	9·56	24	9·60		
,,	8	11	17	11	38	G. P. and G. S. J.	24	9·91	24	10·54	24	10·22		
,,	9	11	41	12	4	G. S. J. and G. P.	24	7·80	24	7·59	24	7·69		
,,	10	11	11	11	39	G. P. and G. S. J.	24	8·06	24	8·35	24	8·20		
,,	11	11	40	12	5	G. S. J. and G. P.	24	9·28	24	9·24	24	9·26		
,,	13	11	14	11	34	G. P. and G. S. J.	24	8·28	24	8·68	24	8·48		
,,	14	11	32	11	56	G. S. J. and G. P.	24	7·77	24	8·17	24	7·97		
,,	15	11	9	11	30	G. P. and G. S. J.	24	7·85	24	8·39	24	8·12		
,,	16	11	30	11	51	G. S. J. and G. P.	24	8·49	24	8·81	24	8·65	24	8·58
,,	17	11	8	11	29	G. P. and G. S. J.	24	8·50	24	8·89	24	8·69		
,,	18	11	53	12	23	G. S. J. and G. P.	24	8·34	24	8·99	24	8·66		
,,	20	11	16	11	36	G. P. and G. S. J.	24	8·31	24	8·93	24	8·62		
,,	21	11	19	11	45	G. S. J. and G. P.	24	8·02	24	8·25	24	8·13		
,,	22	11	32	12	3	G. S. J.	24	8·00	24	8·27	24	8·13		
,,	23	11	53	12	17	G. S. J. and G. P.	24	7·91	24	7·44	24	7·67		
,,	24	11	6	11	29	G. P. and G. S. J.	24	8·85	24	8·55	24	8·70		
,,	25	11	37	11	59	G. S. J. and G. P.	24	8·31	24	8·73	24	8·52		
,,	27	11	8	11	27	G. P. and G. S. J.	24	8·06	24	8·21	24	8·13		
,,	28	11	36	12	9	G. S. J. and G. P.	24	8·01	24	8·47	24	8·24		
,,	29	11	12	11	35	G. P. and G. S. J.	24	8·65	24	8·80	24	8·72		
,,	30	11	37	12	0	G. S. J. and G. P.	24	9·72	24	9·99	24	9·85		
May	1	14	32	14	56	G. S. J. and G. P.	24	9·76	24	10·20	24	9·98		
,,	2	11	8	11	31	G. P. and G. S. J.	24	9·16	24	9·41	24	9·28		
,,	4	11	9	11	30	G. P. and G. S. J.	24	8·20	24	8·62	24	8·41		
,,	5	11	26	12	0	G. S. J. and G. P.	24	8·28	24	8·71	24	8·49		
,,	6	11	15	11	35	G. P. and G. S. J.	24	8·56	24	8·74	24	8·65		
,,	7	11	40	12	5	G. S. J. and G. P.	24	9·07	24	9·57	24	9·32		
,,	8	11	15	11	35	G. P. and G. S. J.	24	8·36	24	8·86	24	8·61		
,,	9	11	38	12	1	G. S. J. and G. P.	24	10·01	24	9·93	24	9·97		
,,	11	11	13	11	33	G. P. and G. S. J.	24	7·85	24	8·42	24	8·13		
,,	12	11	36	11	59	G. S. J. and G. P.	24	9·41	24	9·69	24	9·55		
,,	13	11	4	11	24	G. P. and G. S. J.	24	8·99	24	9·71	24	9·35		
,,	14	11	46	12	11	G. S. J. and G. P.	24	9·60	24	10·07	24	9·83	24	9·47
,,	15	11	8	11	33	G. P. and G. S. J.	24	8·81	24	8·82	24	8·81		
,,	16	11	36	11	56	G. S. J. and G. P.	24	10·18	24	10·57	24	10·37		
,,	18	11	12	11	34	G. P. and G. S. J.	24	9·54	24	9·62	24	9·58		
,,	19	11	26	11	49	G. S. J. and G. P.	24	9·92	24	10·24	24	10·08		
,,	20	11	11	11	32	G. P. and G. S. J.	24	10·05	24	9·96	24	10·00		
,,	22	11	59	12	21	G. S. J. and G. P.	24	10·47	24	10·31	24	10·39		
,,	23	11	20	11	37	G. P. and G. S. J.	24	10·73	24	10·60	24	10·66		
,,	25	11	12	11	29	G. P. and G. S. J.	24	9·43	24	9·71	24	9·57		
,,	27	11	8	11	29	G. P. and G. S. J.	24	10·19	24	10·83	24	10·51		
,,	29	11	41	12	3	G. S. J. and G. P.	24	9·27	24	9·63	24	9·45		
,,	30	11	5	11	28	G. P. and G. S. J.	24	8·61	24	9·25	24	8·93		
June	1	11	10	11	27	G. P. and G. S. J.	24	11·84	24	12·51	24	12·17		
,,	3	11	9	11	26	G. P. and G. S. J.	24	11·57	24	11·59	24	11·58		
,,	5	11	29	11	54	G. S. J. and G. P.	24	10·67	24	10·85	24	10·76		
,,	6	11	13	11	47	G. P. and G. S. J.	24	10·02	24	9·96	24	9·99		
,,	8	10	55	11	15	G. P. and G. S. J.	24	10·40	24	10·48	24	10·44		
,,	10	10	49	11	7	G. P. and G. S. J.	24	10·36	24	10·42	24	10·39		
,,	12	11	21	11	54	G. S. J. and G. P.	24	10·29	24	10·56	24	10·42		
,,	13	14	25	14	44	G. P. and G. S. J.	24	11·04	24	11·30	24	11·17		
,,	15	11	5	11	24	G. P. and G. S. J.	24	9·22	24	9·40	24	9·31	24	10·65
,,	17	11	10	11	26	G. P. and G. S. J.	24	9·47	24	9·85	24	9·66		
,,	19	11	23	11	44	G. S. J. and G. P.	24	10·59	24	11·05	24	10·82		
,,	20	11	31	11	53	G. P. and G. S. J.	24	8·52	24	9·06	24	8·79		
,,	22	11	39	12	0	G. S. J. and G. P.	24	11·47	24	12·07	24	11·77		
,,	24	11	31	11	57	G. S. J. and G. P.	24	10·46	24	11·24	24	10·85		
,,	26	12	0	12	24	G. S. J. and G. P.	24	11·43	24	11·00	24	11·21		
,,	27	12	6	12	35	G. S. J.	24	12·61	24	11·93	24	12·27		
,,	29	11	15	11	41	G. S. J. and G. P.	24	9·61	24	9·25	24	9·43		

1914. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	Monthly Mean Inclination. °	′
JULY	1	10	59	11	16	G. P. and G. S. J.	24	9·23	24	9·35	24	9·29		
,,	3	11	22	11	39	G. P. and G. S. J.	24	10·26	24	10·27	24	10·26		
,,	4	11	20	11	40	G. S. J. and G. P.	24	9·54	24	10·07	24	9·80		
,,	6	11	8	11	27	G. P. and G. S. J.	24	11·03	24	11·14	24	11·08		
,,	8	11	25	11	45	G. S. J. and G. P.	24	10·00	24	10·35	24	10·17		
,,	10	11	22	11	46	G. S. J. and G. P.	24	11·05	24	11·47	24	11·26		
,,	11	11	10	11	28	G. P. and G. S. J.	24	10·14	24	10·72	24	10·43		
,,	13	11	16	11	36	G. S. J. and G. P.	24	8·91	24	9·40	24	9·15		
,,	15	11	5	11	22	G. P. and G. S. J.	24	10·30	24	10·66	24	10·48		
,,	17	11	19	11	40	G. P. and G. S. J.	24	9·82	24	10·14	24	9·98	24	10·51
,,	18	11	16	11	39	G. S. J. and G. P.	24	9·85	24	10·79	24	10·32		
,,	20	11	13	11	28	G. P. and G. S. J.	24	11·24	24	11·74	24	11·49		
,,	22	11	10	11	30	G. S. J. and G. P.	24	11·37	24	11·52	24	11·44		
,,	24	11	35	11	57	G. S. J. and G. P.	24	11·03	24	11·39	24	11·21		
,,	2	11	14	11	31	G. P. and G. S. J.	24	10·02	24	10·34	24	10·18		
,,	27	11	27	11	49	G. S. J. and G. P.	24	10·60	24	11·60	24	11·10		
,,	29	11	6	11	23	G. P. and G. S. J.	24	10·68	24	10·85	24	10·76		
,,	31	11	11	11	31	G. P. and G. S. J.	24	10·79	24	10·88	24	10·83		
AUG.	1	11	24	11	49	G. P.	24	10·42	24	10·71	24	10·56		
,,	3	11	11	11	31	G. P. and G. S. J.	24	10·85	24	10·83	24	10·84		
,,	7	13	17	13	40	G. S. J. and G. P.	24	12·02	24	12·33	24	12·17		
,,	8	11	8	11	26	G. P. and G. S. J.	24	12·07	24	12·28	24	12·17		
,,	10	11	31	11	56	G. S. J. and G. P.	24	10·91	24	11·31	24	11·11		
,,	14	11	13	11	33	G. P. and G. S. J.	24	10·08	24	10·17	24	10·12		
,,	15	11	19	11	40	G. S. J. and G. P.	24	11·02	24	11·03	24	11·02		
,,	17	11	6	11	22	G. P. and G. S. J.	24	11·00	24	11·22	24	11·11	24	11·24
,,	19	11	19	11	52	G. S. J. and G. P.	24	11·51	24	11·37	24	11·44		
,,	21	11	6	11	32	G. S. J. and G. P.	24	10·98	24	10·93	24	10·95		
,,	22	10	57	11	18	G. P. and G. S. J.	24	11·09	24	11·10	24	11·09		
,,	26	10	55	11	14	G. P. and G. S. J.	24	10·67	24	10·91	24	10·79		
,,	28	11	0	11	22	G. P. and G. S. J.	24	10·60	24	10·55	24	10·57		
,,	29	11	24	11	50	G. S. J. and G. P.	24	12·47	24	12·60	24	12·53		
,,	31	10	56	11	12	G. P. and G. S. J.	24	12·08	24	12·18	24	12·13		
SEPT.	2	11	17	11	44	G. S. J. and G. P.	24	12·05	24	11·94	24	11·99		
,,	4	11	37	11	59	G. S. J. and G. P.	24	12·42	24	12·82	24	12·62		
,,	5	10	56	11	15	G. P. and G. S. J.	24	11·80	24	11·56	24	11·68		
,,	7	11	12	11	37	G. S. J. and G. P.	24	11·54	24	12·41	24	11·97		
,,	9	11	17	11	34	G. P. and G. S. J.	24	10·87	24	10·88	24	10·87		
,,	11	10	58	11	18	G. P.	24	11·82	24	11·72	24	11·77	24	12·54
,,	12	11	37	12	2	G. S. J. and G. P.	24	12·54	24	12·38	24	12·46		
,,	14	10	57	11	16	G. P. and G. S. J.	24	12·75	24	13·02	24	12·88		
,,	16	11	15	11	42	G. S. J. and G. P.	24	13·25	24	13·49	24	13·37		
,,	25	11	8	11	36	G. P. and G. S. J.	24	12·62	24	13·11	24	12·86		
,,	26	11	31	11	55	G. S. J. and G. P.	24	13·49	24	14·23	24	13·86		
,,	30	11	19	11	38	G. S. J. and G. P.	24	13·78	24	14·45	24	14·11		
OCT.	2	11	34	11	59	G. S. J. and G. P.	24	12·35	24	12·55	24	12·45		
,,	3	11	6	11	25	G. P. and G. S. J.	24	13·68	24	13·59	24	13·63		
,,	5	11	54	12	18	G. S. J. and G. P.	24	12·52	24	13·22	24	12·87		
,,	7	10	58	11	17	G. P. and G. S. J.	24	14·03	24	14·09	24	14·06		
,,	9	11	1	11	23	G. P. and G. S. J.	24	13·05	24	12·83	24	12·94		
,,	10	11	31	11	50	G. S. J. and G. P.	24	12·56	24	12·94	24	12·75		
,,	12	10	58	11	13	G. P. and G. S. J.	24	12·22	24	12·42	24	12·32		
,,	14	11	29	11	47	G. S. J. and G. P.	24	12·70	24	12·75	24	12·72		
,,	16	11	23	11	43	G. S. J. and G. P.	24	12·93	24	13·28	24	13·10	24	13·27
,,	17	11	7	11	23	G. P. and G. S. J.	24	12·27	24	12·75	24	12·51		
,,	21	11	4	11	19	G. P. and G. S. J.	24	12·28	24	12·17	24	12·22		
,,	23	11	16	11	33	G. P. and G. S. J.	24	12·41	24	12·59	24	12·50		
,,	24	11	24	11	44	G. S. J. and G. P.	24	12·83	24	12·94	24	12·88		
,,	26	11	3	11	17	G. P. and G. S. J.	24	12·84	24	12·70	24	12·77		
,,	28	11	20	11	37	G. S. J. and G. P.	24	14·48	24	14·92	24	14·70		
,,	30	11	30	11	50	G. S. J. and G. P.	24	15·59	24	15·36	24	15·47		
,,	31	11	45	11	59	G. P. and G. S. J.	24	15·60	24	15·67	24	15·63		

1914.		Alibag Civil Time (0 to 24 hours)				Observers.	Face of Circle.				Mean Inclination.		Monthly Mean Inclination.	
Date.		At commencement.		At conclusion.			East.		West.					
		H.	m.	H.	m.		°	′	°	′	°	′	°	′
Nov.	2	11	21	11	45	G. S. J. and G. P.	24	14·38	24	14·78	24	14·58		
,,	3	12	6	12	26	G. S. J. and G. P.	24	14·59	24	15·26	24	14·92		
,,	4	10	58	11	17	G. P. and G. S. J.	24	14·63	24	14·21	24	14·42		
,,	5	11	25	11	46	G. S. J. and G. P.	24	14·61	24	15·13	24	14·87		
,,	6	11	9	11	23	G. P. and G. S. J.	24	14·29	24	14·59	24	14·44		
,,	7	11	22	11	39	G. S. J. and G. P.	24	14·76	24	14·80	24	14·78		
,,	9	11	2	11	18	G. P. and G. S. J.	24	14·00	24	14·08	24	14·04		
,,	11	11	16	11	35	G. S. J. and G. P.	24	13·67	24	14·27	24	13·97		
,,	13	11	21	11	38	G. S. J. and G. P.	24	14·33	24	14·94	24	14·63		
,,	14	11	10	11	27	G. P. and G. S. J.	24	14·84	24	14·70	24	14·77	24	14·88
,,	16	11	29	11	46	G. S. J. and G. P.	24	14·77	24	14·50	24	14·63		
,,	18	11	44	12	12	G. S. J.	24	15·93	24	15·66	24	15·79		
,,	20	12	13	12	40	G. S. J.	24	14·98	24	15·17	24	15·07		
,,	21	11	55	12	23	G. S. J.	24	14·67	24	14·70	24	14·68		
,,	23	11	3	11	22	G. P. and G. S. J.	24	15·12	24	15·07	24	15·09		
,,	25	11	36	11	52	G. S. J. and G. P.	24	14·35	24	14·42	24	14·38		
,,	27	11	32	11	52	G. S. J. and G. P.	24	16·09	24	16·16	24	16·12		
,,	28	11	25	11	40	G. P. and G. S. J.	24	15·57	24	16·53	24	16·05		
,,	30	11	25	11	49	G. S. J. and G. P.	24	15·53	24	15·45	24	15·49		
Dec.	2	11	2	11	18	G. P. and G. S. J.	24	15·65	24	15·50	24	15·57		
,,	4	11	8	11	24	G. P. and G. S. J.	24	15·76	24	15·83	24	15·79		
,,	5	11	45	12	1	G. S. J. and G. P.	24	15·98	24	16·55	24	16·26		
,,	7	11	0	11	16	G. P. and G. S. J.	24	15·77	24	15·63	24	15·70		
,,	9	11	38	11	55	G. S. J. and G. P.	24	15·32	24	15·66	24	15·49		
,,	11	11	58	12	15	G. S. J. and G. P.	24	15·31	24	15·21	24	15·26		
,,	12	11	13	11	28	G. P. and G. S. J.	24	15·56	24	15·30	24	15·43		
,,	14	11	12	11	31	G. S. J. and G. P.	24	16·03	24	15·96	24	15·99	24	15·58
,,	16	10	53	11	20	G. P. and G. S. J.	24	15·76	24	15·81	24	15·78		
,,	18	11	6	11	28	G. P. and G. S. J.	24	15·84	24	15·14	24	15·49		
,,	19	12	14	12	31	G. S. J. and G. P.	24	16·06	24	15·57	24	15·81		
,,	21	11	2	11	19	G. P. and G. S. J.	24	15·72	24	15·01	24	15·36		
,,	23	11	37	11	56	G. S. J. and G. P.	24	15·55	24	15·84	24	15·69		
,,	26	11	39	12	0	G. P. and G. S. J.	24	15·71	24	15·43	24	15·57		
,,	28	11	38	12	0	G. S. J. and G. P.	24	14·63	24	15·34	24	14·98		
,,	30	11	16	11	33	G. P. and G. S. J.	24	15·16	24	15·08	24	15·12		

The mean *observed Inclination for the year 1914 = 24° 10′·90

* The monthly and annual Means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table IIIb.

OBSERVATIONS OF INCLINATION, 1914 (JANUARY TO MAY).

Taken with Dip Circle No. 160 (Cambridge Scientific Instrument Co.) and two 3½ inch Needles Nos. 1/05 and 2/05 by Dover Charlton.

1914. Date.	Alibag Civil Time (0 to 24 hours) At commencement.	At conclusion.	Observer.	Needle marked.	End of Needle Dipping. A. Face of Circle. East.	A. West.	B. Face of Circle. East.	B. West.	Mean Dip.	Monthly Mean for each Needle.	* Monthly Mean.
	H. m.	H. m.			° ′	° ′	° ′	° ′	° ′	° ′	° ′
JAN. 3	13 21	14 2	G. S. J.	2/05	23 58·5	24 12·5	24 4·7	24 15·9	24 7·9	No. 1/05 24 10·5	24 9·4
„ 10	13 44	14 31	G. S. J.	1/05	24 6·4	24 15·2	24 2·0	24 19·6	24 10·8		
„ 17	12 2	12 53	G. S. J.	2/05	24 1·2	24 9·0	24 8·6	24 15·9	24 8·7		
„ 24	13 41	14 23	G. S. J.	1/05	24 0·7	24 11·7	24 10·7	24 18·2	24 10·3	No. 2/05 24 8·6	
„ 31	12 0	12 38	A.	2/05	23 59·9	24 13·0	24 7·7	24 16·5	24 9·3		
FEB. 7	13 6	14 7	G. S. J.	1/05	24 17·7	24 5·1	24 14·9	24 3·7	24 10·3	No. 1/05 24 10·5	24 9·8
„ 14	13 20	14 7	G. S. J.	2/05	24 4·2	24 11·7	24 0·4	24 21·8	24 9·5		
„ 21	12 55	13 40	G. S. J.	1/05	24 4·7	24 12·9	24 8·8	24 16·7	24 10·8	No. 2/05 24 9·1	
„ 28	13 27	14 14	G. S. J.	2/05	24 3·4	24 9·4	24 6·0	24 16·3	24 8·8		
MARCH 7	13 12	13 58	G. S. J.	1/05	23 58·2	24 12·1	24 6·6	24 15·4	24 8·1	No. 1/05 24 8·3	24 7·9
„ 14	12 54	13 43	G. S. J.	2/05	23 57·2	24 11·7	24 5·3	24 16·6	24 7·7		
„ 21	13 23	14 3	G. S. J.	1/05	24 4·1	24 10·7	24 7·0	24 12·5	24 8·6	No. 2/05 24 7·4	
„ 28	13 5	13 54	G. S. J.	2/05	23 57·7	24 6·5	24 3·9	24 20·9	24 7·2		
APRIL 11	12 58	13 43	G. S. J.	1/05	24 2·0	24 11·5	24 14·5	24 14·1	24 10·5	No. 1/05 24 9·5	24 9·9
„ 18	13 10	13 54	G. S. J.	2/05	24 4·0	24 9·7	24 10·0	24 18·2	24 10·5		
„ 25	12 47	13 42	G. S. J.	1/05	24 3·6	24 6·4	24 10·5	24 14·0	24 8·6	No. 2/05 24 10·5	
MAY 2	12 43	13 28	G. S. J.	2/05	24 4·2	24 3·7	24 10·7	24 15·3	24 8·5	No. 1/05 24 10·3	24 9·7
„ 9	12 52	13 41	G. S. J.	1/05	24 2·1	24 16·5	24 4·5	24 18·1	24 10·3		
„ 16	13 0	13 49	G. S. J.	2/05	24 1·0	24 9·4	24 12·7	24 16·9	24 10·0	No. 2/05 24 9·2	

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

Absolute Magnetical Observations, Alibag—Table IIIb.—*(contd.)*

OBSERVATIONS OF INCLINATION, 1914 (May to December).

Taken with Inductor No. 108 and Galvanometer No. 108A by Otto Tœpfer and Sons.

1914. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	Monthly Mean Inclination. °	′
MAY	21	12	10	13	0	G. S. J. and G. P.	24	11·56	24	10·97	24	11·26		
„	23	7	44	8	15	G. S. J. and G. P.	24	13·24	24	12·58	24	12·91		
„	26	11	49	12	8	G. S. J. and G. P.	24	10·16	24	10·43	24	10·29		
„	28	12	3	12	30	G. S. J. and G. P.	24	10·03	24	10·38	24	10·20		
„	30	7	12	7	43	G. S. J. and G. P.	24	12·89	24	13·88	24	13·38		
JUNE	2	11	14	11	41	G. S. J. and G. P.	24	12·06	24	12·16	24	12·11		
„	4	11	36	12	5	G. S. J. and G. P.	24	11·70	24	11·3)	24	11·50		
„	6	7	4	7	35	G. S. J. and G. P.	24	13·32	24	13·02	24	13·17		
„	9	11	29	11	51	G. S. J. and G. P.	24	11·99	24	11·58	24	11·78		
„	11	11	34	11	58	G. S. J. and G. P.	24	10·92	24	10·93	24	10·92		
„	13	6	57	7	24	G. S. J. and G. P.	24	14·65	24	14·49	24	14·57		
„	16	11	52	12	17	G. S. J. and G. P.	24	11·32	24	11·34	24	11·33	24	12·27
„	18	11	14	11	36	G. S. J. and G. P.	24	11·24	24	11·51	24	11·37		
„	20	7	38	8	9	G. S. J. and G. P.	24	13·58	24	12·95	24	13·26		
„	23	11	31	12	6	G. P. and G. S. J.	24	10·83	24	10·16	24	10·49		
„	25	11	19	11	58	G. P. and G. S. J.	24	11·22	24	11·11	24	11·16		
„	27	7	53	8	21	G. S. J. and G. P.	24	15·07	24	15·41	24	15·24		
„	30	12	26	12	58	G. S. J. and G. P.	24	12·18	24	13·08	24	12·63		
JULY	2	11	26	12	3	G. S. J. and G. P.	24	11·26	24	12·12	24	11·69		
„	4	7	38	8	7	G. P. and G. S. J.	24	14·58	24	15·25	24	14·91		
„	7	11	28	12	9	G. P. and G. S. J.	24	13·30	24	13·60	24	13·45		
„	9	11	9	11	44	G. P. and G. S. J.	24	11·73	24	11·72	24	11·72		
„	11	7	16	8	7	G. S. J. and G. P.	24	15·06	24	15·18	24	15·12		
„	14	11	19	11	40	G. S. J. and G. P.	24	10·68	24	10·55	24	10·61		
„	16	11	15	11	39	G. S. J. and G. P.	24	12·72	24	12·11	24	12·41	24	13·07
„	18	7	19	7	41	G. P. and G. S. J.	24	14·96	24	14·88	24	14·92		
„	21	11	3	11	23	G. P. and G. S. J.	24	12·70	24	12·78	24	12·74		
„	23	11	4	11	35	G. P. and G. S. J.	24	11·30	24	11·92	24	11·61		
„	25	7	41	8	13	G. S. J. and G. P.	24	14·42	24	14·21	24	14·31		
„	28	11	26	11	52	G. S. J. and G. P.	24	13·27	24	13·56	24	13·41		
„	30	11	27	11	52	G. S. J. and G. P.	24	13·02	24	12·89	24	12·95		
AUG.	1	7	20	7	43	G. P. and G. S. J.	24	16·27	24	16·05	24	16·16		
„	4	10	57	11	18	G. P. and G. S. J.	24	13·28	24	12·65	24	12·96		
„	6	12	15	12	49	G. P. and G. S. J.	24	12·95	24	13·09	24	13·02		
„	8	7	24	7	50	G. S. J. and G. P.	24	15·25	24	14·62	24	14·93		
„	11	11	31	11	52	G. S. J. and G. P.	24	12·60	24	13·31	24	12·95		
„	12	11	22	11	46	G. P. and G. S. J.	24	11·45	24	10·90	24	11·17		
„	15	7	42	8	1	G. P. and G. S. J.	24	15·47	24	15·19	24	15·33	24	13·43
„	18	11	2	11	25	G. P. and G. S. J.	24	11·39	24	11·77	24	11·58		
„	20	10	55	11	13	G. P. and G. S. J.	24	11·83	24	12·28	24	12·05		
„	22	7	18	7	37	G. S. J. and G. P.	24	15·48	24	15·09	24	15·28		
„	25	11	13	11	31	G. S. J. and G. P.	24	12·10	24	12·50	24	12·30		
„	27	11	24	11	40	G. S. J. and G. P.	24	12·32	24	12·31	24	12·31		
„	29	6	58	7	23	G. P. and G. S. J.	24	14·57	24	14·53	24	14·55		
SEPT.	1	10	55	11	14	G. P. and G. S. J.	24	12·71	24	12·69	24	12·70		
„	3	11	0	11	17	G. P. and G. S. J.	24	11·70	24	11·93	24	11·81		
„	5	7	13	7	31	G. S. J. and G. P.	24	17·22	24	17·31	24	17·26		
„	8	11	33	11	56	G. S. J. and G. P.	24	13·58	24	13·41	24	13·49		
„	10	11	37	11	54	G. S. J. and G. P.	24	13·11	24	13·55	24	13·33		
„	12	6	54	7	19	G. P. and G. S. J.	24	16·89	24	17·09	24	16·99		
„	15	11	16	11	37	G. P. and G. S. J.	24	13·73	24	13·84	24	13·78		
„	17	10	55	11	12	G. P. and G. S. J.	24	13·76	24	13·45	24	13·60		
„	18	13	2	13	22	G. S. J. and G. P.	24	13·21	24	13·72	24	13·46	24	14·12
„	19	11	10	11	22	G. P. and G. S. J.	24	13·33	24	13·63	24	13·48		
„	21	11	14	11	29	G. S. J. and G. P.	24	12·87	24	12·31	24	12·59		
„	22	11	20	11	37	G. S. J. and G. P.	24	12·91	24	13·70	24	13·30		
„	23	10	58	11	15	G. P. and G. S. J.	24	13·05	24	13·15	24	13·10		
„	24	11	22	11	47	G. S. J. and G. P.	24	14·12	24	14·38	24	14·25		
„	26	7	18	7	49	G. P. and G. S. J.	24	17·73	24	17·35	24	17·54		
„	29	11	58	12	20	G. P. and G. S. J.	24	14·76	24	15·59	24	15·17		

1914.		Alibag Civil Time (0 to 24 hours)				Observers.	Face of Circle.				Mean Inclination.		* Monthly Mean Inclination.	
Date.		At commencement.		At conclusion.			East.		West.					
		H.	m.	H.	m.		°	′	°	′	°	′	°	′
Oct.	1	11	7	11	25	G. P. and G. S. J.	24	15·24	24	14·52	24	14·88		
"	3	7	15	7	55	G. S. J. and G. P.	24	17·13	24	17·53	24	17·33		
"	6	11	24	11	48	G. S. J. and G. P.	24	14·54	24	15·21	24	14·87		
"	8	11	58	12	17	G. S. J. and G. P.	24	13·88	24	13·43	24	13·65		
"	10	7	8	7	27	G. P. and G. S. J.	24	17·03	24	16·94	24	16·98		
"	13	10	59	11	23	G. P. and G. S. J.	24	14·34	24	14·24	24	14·29	24	15·47
"	15	11	1	11	20	G. P. and G. S. J.	24	14·13	24	13·92	24	14·02		
"	17	7	32	7	51	G. S. J. and G. P.	24	17·37	24	17·32	24	17·34		
"	22	11	27	11	43	G. S. J. and G. P.	24	13·13	24	13·42	24	13·27		
"	25	7	45	8	3	G. P. and G. S. J.	24	17·79	24	17·56	24	17·67		
"	27	11	26	11	39	G. P. and G. S. J.	24	14·56	24	14·73	24	14·64		
"	29	11	12	11	36	G. P. and G. S. J.	24	16·90	24	16·61	24	16·75		
Nov.	7	7	20	7	36	G. P. and G. S. J.	24	16·48	24	16·61	24	16·54		
"	10	11	51	12	7	G. P. and G. S. J.	24	14·25	24	14·47	24	14·36		
"	12	11	40	11	59	G. P. and G. S. J.	24	15·47	24	15·76	24	15·61		
"	14	7	32	7	51	G. S. J. and G. P.	24	17·12	24	17·28	24	17·20		
"	17	11	30	11	56	G. S. J. and G. P.	24	14·66	24	15·12	24	14·89	24	15·96
"	19	11	25	11	50	G. S. J. and G. P.	24	15·38	24	16·02	24	15·70		
"	21	7	36	7	58	G. P. and G. S. J.	24	16·95	24	16·60	24	16·77		
"	24	11	5	11	24	G. P. and G. S. J.	24	16·04	24	15·72	24	15·88		
"	26	11	5	11	20	G. P. and G. S. J.	24	16·15	24	15·61	24	15·88		
"	28	7	50	8	15	G. S. J. and G. P.	24	16·96	24	16·61	24	16·78		
Dec.	1	11	28	11	46	G. S. J. and G. P.	24	15·32	24	15·34	24	15·33		
"	3	11	32	11	50	G. S. J. and G. P.	24	16·08	24	15·97	24	16·02		
"	5	7	22	7	41	G. P. and G. S. J.	24	16·46	24	16·47	24	16·46		
"	8	11	7	11	24	G. P. and G. S. J.	24	15·54	24	15·59	24	15·56		
"	10	11	17	11	38	G. P. and G. S. J.	24	15·86	24	15·80	24	15·83		
"	12	7	39	8	0	G. S. J. and G. P.	24	17·29	24	17·22	24	17·25		
"	15	11	40	11	57	G. S. J. and G. P.	24	16·64	24	16·25	24	16·44		
"	17	11	26	11	43	G. S. J. and G. P.	24	15·90	24	15·94	24	15·92	24	16·42
"	19	7	25	7	43	G. P. and G. S. J.	24	17·09	24	17·14	24	17·11		
"	22	11	6	11	22	G. P. and G. S. J.	24	16·01	24	15·95	24	15·98		
"	24	7	47	8	5	G. S. J. and G. P.	24	18·00	24	17·78	24	17·89		
"	24	11	5	11	27	G. P. and G. S. J.	24	16·14	24	16·04	24	16·09		
"	29	11	59	12	17	G. S. J. and G. P.	24	16·36	24	16·45	24	16·40		
"	31	7	37	7	56	G. P. and G. S. J.	24	17·45	24	17·52	24	17·48		
"	31	11	42	11	59	G. S. J. and G. P.	24	16·48	24	16·64	24	16·56		
* The mean observed Inclination for the months June to December 1914 =													24	14·39

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

Absolute Magnetical Observations, Alibag—Table Ia.

Observations of Vibration and Deflection, taken with Magnetometer No. 7 (T. Cooke and Sons) for the determination of Absolute Horizontal Force.

1915.

1915. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	Angle of Deflection of Magnet marked 7. Distance. 30·0 cms.	Angle of Deflection of Magnet marked 7. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	Values of H. From Deflection at distance. 30·0 cms. ($H_{30\cdot0}$).	Values of H. Difference. $H_{22\cdot5}-H_{30\cdot0}$	Values of H. Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
JAN. 6	13 37	2·7055	1·50	24·4	−0·5	7·492	83·60	26 39 24	10 50 30	24·6	7·391	83·60	G. S. J.	938·02	0·36879	0·36879	·00000	0·36879	
„ „	15 20	2·7066	1·50	24·9	„	7·076	83·60	26 39 50	10 50 47	24·8	7·140	83·60	G. S. J.	937·97	·36863	·36860	+·00003	·36861	
„ 13	13 26	2·7059	1·50	26·0	−0·3	7·590	82·90	26 37 24	10 49 56	26·2	7·525	82·90	G. S. J.	938·12	·36894	·36890	+·00004	·36892	
„ „	15 23	2·7067	1·50	26·7	„	7·506	82·95	26 37 33	10 49 58	26·4	7·496	82·95	G. S. J.	938·10	·36886	·36882	+·00004	·36884	
„ 20	13 26	2·7054	1·50	25·9	−0·3	8·182	82·80	26 36 37	10 49 32	26·0	8·076	82·80	G. S. J.	937·99	·36911	·36909	+ 00002	·36910	0·368835
„ „	15 28	2·7059	1·50	26·2	„	7·788	82·80	26 37 6	10 49 41	26·0	7·858	82·80	G. S. J.	937·99	·36901	·36900	+·00001	·36900	
„ 27	12 21	2·7061	1·50	25·5	−0·4	7·704	82·90	26 38 7	10 50 3	25·6	7·529	82·90	G. S. J.	937·95	·36886	·36885	+ 00001	36885	
„ „	15 24	2·7074	1·50	25·5	„	6·842	82·90	26 39 11	10 50 26	25·5	7·088	82·90	G. S. J.	937·76	·36857	·36857	·00000	·36857	
FEB. 3	10 17	2·7058	1·50	25·9	−0·3	7·728	82·90	26 37 8	10 49 42	26·0	7·837	82·90	G. S. J.	937·97	·36899	·36899	·00000	·36899	
„ „	12 11	2·7062	1·50	25·9	„	8·013	82·85	26 36 57	10 49 40	25·9	8·009	82·85	G. S. J.	937·78	·36898	·36894	+·00004	·36896	
„ 10	13 39	2·7069	1·50	25·3	−0·1	7·064	82·35	26 39 26	10 50 35	25·4	7·040	82·35	G. S. J.	937·95	·36860	·36860	·00000	·36860	
„ „	15 24	2·7072	1·48	25·5	„	7·089	82·32	26 39 17	10 50 31	25·6	7·033	82·32	G. S. J.	937·89	·36858	·36856	+·00002	·36857	·368839
„ 17	13 46	2·7046	1·53	25·2	−0·1	8·326	82·05	26 37 8	10 49 45	25·4	8·077	82·05	G. S. J.	938·12	·36916	·36913	+·00003	·36914	
„ „	15 30	2·7064	1·50	25·6	„	7·508	82·07	26 37 38	10 49 59	25·5	7·766	82·07	G. S. J.	937·76	·36888	·36884	+·00004	·36886	
„ 24	12 33	2·7050	1·48	24·7	+0·2	8·061	81·60	26 37 39	10 49 54	24·9	8·022	81·60	G. S. J.	937·89	·36905	·36904	+·00001	·36904	
„ „	15 21	2·7074	1·51	25·4	„	6·996	81·60	26 39 28	10 50 40	25·1	7·167	81·60	G. S. J.	937·78	·36857	·36854	+·00003	·36855	
MARCH 3	13 10	2·7056	1·50	26·6	+0·2	8·321	82·00	26 35 36	10 49 9	26·7	8·193	82·00	G. S. J.	937·97	·36919	·36916	+·00003	·36917	
„ „	15 28	2·7065	1·50	27·0	„	7·845	82·00	26 36 0	10 49 20	26·9	7·937	82·00	G. S. J.	937·89	·36904	·36900	+·00004	·36902	
„ 10	12 52	2·7078	1·47	27·3	+0·1	7·431	82·50	26 36 37	10 49 35	27·3	7·376	82·50	G. S. J.	937·78	·36878	·36875	+·00003	·36876	
„ „	15 25	2·7082	1·50	27·8	„	7·136	82·50	26 37 8	10 49 41	27·5	7·110	82·50	G. S. J.	937·91	·36870	·36869	+·00001	·36869	
„ 17	13 37	2·7062	1·50	27·0	−0·2	8·000	82·90	26 36 2	10 49 16	27·2	7·700	82·90	G. S. J.	938·06	·36905	·36904	+·00001	·36904	
„ „	15 0	2·7080	1·49	27·5	„	7·205	82·90	26 36 12	10 49 26	27·4	7·460	82·90	G. S. J.	937·65	·36881	·36877	+·00004	·36879	·368864
„ 24	13 0	2·7085	1·48	29·6	+0·1	7·500	83·90	26 34 13	10 48 38	29·7	7·306	83·90	G. S. J.	937·93	·36893	·36890	+·00003	·36891	
„ „	15 20	2·7100	1·50	29·7	„	6·882	83·90	26 34 52	10 48 53	29·7	7·016	83·90	G. S. J.	937·57	·36865	·36862	+·00003	·36863	
„ 31	13 21	2·7081	1·50	29·1	+0·1	7·415	84·85	26 34 50	10 48 49	28·9	7·266	84·85	G. S. J.	937·93	·36894	·36894	·00000	·36894	
„ „	15 23	2·7093	1·50	29·1	„	6·930	84·87	26 35 20	10 49 6	29·0	6·995	84·87	G. S. J.	937·69	·36871	·36868	+·00003	·36869	

April	7	12	29	2·7076	1·49	29·5	+0·3	7·901	85·75	26	32	40	10	4	1	29·5	7·901	85·75	G. S. J.	937·73	·36922	·36921	+·00001	·36921	
„	„	15	28	2·7091	1·48	30·0	„	7·358	85·72	26	33	20	10	48	18	29·8	7·488	85·72	G. S. J.	937·61	·36897	·36894	+·00003	·36895	
„	14	13	10	2·7083	1·50	30·1	+0·2	7·979	86·50	26	32	1	10	47	47	30·3	7·858	86·50	G. S. J.	937·63	·36917	·36916	+·00001	·36916	
„	„	15	29	2·7090	1·50	30·9	„	7·333	86·50	26	32	27	10	47	54	30·8	7·476	86·50	G. S. J.	937·80	·36905	·36905	·00000	·36905	
„	21	12	53	2·7095	1·49	31·9	+0·1	7·097	87·50	26	32	10	10	47	52	31·9	6·912	87·50	G. S. J.	938·04	·36901	·36898	+·00003	·36899	·368991
„	„	15	27	2·7114	1·50	32·1	„	6·632	87·55	26	32	47	10	47	59	32·1	6·666	87·55	G. S. J.	937·63	·36869	·36869	·00000	·36869	
„	28	13	50	2·7084	1·49	30·5	+0·4	7·246	88·30	26	33	12	10	48	14	30·3	7·066	88·30	G. S. J.	938·02	·36907	·36905	+·00002	·36906	
„	„	15	29	2·7096	1·50	30·2	„	6·742	88·30	26	33	40	10	48	25	30·4	6·870	88·30	G. S. J.	937·67	·36882	·36882	·00000	·36882	
									Mean	for	the	mo	nths	from		January		to April		937·87			+·000020		
May	5	12	34	2·7089	1·51	31·0	+0·2	7·287	88·90	26	32	34	10	48	3	30·2	7·163	88·90	A.	937·80	·36913	·36909	+·00004	·36911	
„	„	14	47	2·7097	1·51	31·0	„	6·735	88·90	26	33	28	10	48	16	30·5	6·840	88·90	A.	937·78	·36890	·36889	+·00001	·36889	
„	12	13	7	2·7104	1·51	31·3	+0·5	6·363	89·20	26	33	56	10	48	31	31·0	6·364	89·20	A.	937·86	·36873	·36871	+·00002	·36872	
„	„	14	26	2·7099	1·51	31·2	„	6·447	89·20	26	34	0	10	48	33	30·9	6·362	89·20	A.	938·04	·36879	·36877	+·00002	·36878	·368942
„	19	12	24	2·7099	1·51	30·8	+0·2	7·153	89·50	26	30	17	10	47	19	30·6	7·051	89·50	A.	*936·91	·36919	·36911	+·00008	·36915	
„	„	13	39	2·7111	1·50	30·7	„	6·832	89·50	26	30	20	10	47	18	30·7	7·008	89·50	A.	936·48	·36899	·36892	+·00007	·36895	
„	26	12	34	2·7111	1·50	31·6	+0·5	6·846	90·20	26	30	17	10	47	12	31·3	6·702	90·20	A.	936·79	·36902	·36897	+·00005	·36899	
„	„	13	53	2·7112	1·50	31·3	„	6·541	90·20	26	30	30	10	47	21	31·0	6·630	90·20	A.	936·70	·36899	·36892	+·00007	·36895	
June	2	12	26	2·7109	1·50	31·6	+0·1	6·892	90·80	26	30	10	10	47	9	30·7	6·866	90·80	A.	936·70	·36912	·36908	+·00004	·36910	
„	„	13	39	2·7111	1·50	31·0	„	6·637	90·80	26	30	17	10	47	11	30·9	6·837	90·80	A.	936·57	·36900	·36896	+·00004	·36898	
„	9	14	2	2·7120	1·50	32·6	+0·2	6·711	91·40	26	30	0	10	46	57	32·1	6·400	91·40	G. S. J.	936·79	·36895	·36894	+·00001	·36894	
„	„	15	47	2·7130	1·50	32·0	„	6·257	91·50	26	30	5	10	47	6	32·0	6·341	91·50	G. S. J.	936·33	·36876	·36871	+·00005	·36873	
„	16	13	11	2·7124	1·48	32·8	+0·7	6·882	91·85	26	28	2	10	46	20	32·9	6·780	91·85	G. S. J.	936·40	·36905	·36901	+·00004	·36903	
„	„	15	19	2·7134	1·48	32·9	„	6·088	91·85	26	28	55	10	46	42	33·0	6·370	91·85	G. S. J.	936·33	·36882	·36877	+·00005	·36879	·368881
„	23	13	20	2·7112	1·50	30·7	+0·8	6·573	91·90	26	30	46	10	47	18	30·9	6·353	91·90	G. S. J.	936·57	·36892	·36889	+·00003	·36890	
„	„	15	30	2·7123	1·50	30·9	„	5·753	91·90	26	31	42	10	47	37	30·9	6·020	91·90	G. S. J.	936·46	·36868	·36867	+·00001	·36867	
„	30	12	55	2·7082	1·52	27·6	+0·8	6·975	89·40	26	33	0	10	48	12	27·9	6·807	89·40	G. S. J.	936·85	·36909	·36905	+·00004	·36907	
„	„	15	23	2·7109	1·50	27·8	„	5·986	89·30	26	34	13	10	48	39	27·8	6·285	89·30	G. S. J.	936·29	·36862	·36859	+·00003	·36860	
July	7	13	36	2·7112	1·50	30·3	+0·9	6·537	88·30	26	32	15	10	47	47	30·4	6·453	88·30	G. S. J.	936·74	·36877	·36877	·00000	·36877	
„	„	15	28	2·7121	1·50	30·5	„	6·193	88·30	26	32	21	10	47	50	30·4	6·365	88·30	G. S. J.	936·48	·36865	·36865	·00000	·36865	
„	14	12	16	2·7107	1·50	30·4	+0·7	6·991	88·30	26	30	55	10	47	17	30·2	7·008	88·30	G. S. J.	936·53	·36901	·36900	+·00001	·36900	
„	„	15	19	2·7119	1·50	30·7	„	6·320	88·30	26	31	49	10	47	41	30·6	6·467	88·30	G. S. J.	936·55	·36874	·36872	+·00002	·36873	
„	21	13	49	2·7106	1·50	30·3	+0·7	7·041	88·60	26	30	57	10	47	13	30·3	6·991	88·60	G. S. J.	936·53	·36899	·36901	−·00002	·36900	·368822
„	„	15	29	2·7105	1·50	30·2	„	6·772	88·60	26	30	55	10	47	21	30·3	6·862	88·60	G. S. J.	936·59	·36900	·36899	+·00001	·36899	
„	28	13	20	2·7090	1·51	27·4	+0·7	6·700	87·35	26	34	43	10	48	51	27·2	6·532	87·35	G. S. J.	936·83	·36883	·36880	+·00003	·36881	
„	„	15	26	2·7099	1·50	26·8	„	6·332	87·35	26	35	22	10	49	2	26·8	6·397	87·35	G. S. J.	936·46	·36864	·36862	+·00002	·36863	
Aug.	4	12	45	2·7108	1·50	28·2	+0·9	6·471	86·50	26	33	42	10	48	21	28·3	6·655	86·50	G. S. J.	936·31	·36867	·36867	·00000	·36867	
„	„	15	14	2·7109	1·50	28·3	„	6·311	86·50	26	33	37	10	48	22	28·4	6·601	86·50	G. S. J.	936·33	·36867	·36865	+·00002	·36866	
„	11	13	6	2·7111	1·50	29·6	+0·6	6·985	85·90	26	32	7	10	47	46	29·6	7·021	85·90	G. S. J.	936·40	·36881	·36880	+·00001	·36880	
„	„	15	24	2·7115	1·50	29·8	„	6·585	85·90	26	32	22	10	47	52	29·9	6·797	85·90	G. S. J.	936·46	·36871	·36871	·00000	·36871	·368834
„	18	12	29	2·7097	1·49	29·9	+0·7	7·362	86·05	26	30	49	10	47	16	29·9	7·377	86·05	G. S. J.	936·68	·36914	·36913	+·00001	·36913	
„	„	15	18	2·7111	1·50	30·1	„	6·962	86·05	26	31	26	10	47	31	30·0	7·027	86·05	G. S. J.	936·42	·36888	·36887	+·00001	·36887	
„	25	12	51	2·7095	1·50	27·9	+0·6	6·993	86·40	26	33	8	10	48	11	27·7	6·959	86·40	G. S. J.	936·44	·36894	·36893	+·00001	·36893	
„	„	15	19	2·7090	1·50	27·4	„	6·845	86·40	26	33	41	10	48	29	27·4	6·891	86·40	G. S. J.	936·61	·36893	·36888	+·00005	·36890	
Sept.	1	12	14	2·7095	1·50	29·3	+0·9	7·450	86·30	26	30	51	10	47	17	29·5	7·436	86·30	G. S. J.	936·53	·36914	·36913	+·00001	·36913	
„	„	15	14	2·7102	1·50	29·7	„	6·729	86·30	26	31	52	10	47	38	29·5	6·958	86·30	G. S. J.	936·63	·36898	·36898	·00000	·36898	
„	8	13	50	2·7084	1·50	28·2	+0·5	7·461	86·60	26	32	6	10	47	46	28·1	7·253	86·60	G. S. J.	936·70	·36919	·36918	+·00001	·36918	
„	„	15	27	2·7096	1·50	28·0	„	6·656	86·60	26	33	5	10	48	12	28·0	6·938	86·60	G. S. J.	936·48	·36891	·36888	+·00003	·36889	
„	15	13	7	2·7093	1·50	29·1	+1·0	7·215	86·90	26	31	55	10	47	37	29·2	7·112	86·90	G. S. J.	936·74	·36907	·36909	−·00002	·36908	·368807
„	„	15	16	2·7109	1·50	29·5	„	6·532	86·90	26	32	27	10	47	55	29·4	6·676	86·90	G. S. J.	936·53	·36882	·36880	+·00002	·36881	
„	22	13	45	2·7110	1·50	29·3	+0·7	6·356	87·22	26	33	19	10	48	15	29·5	6·168	87·22	G. S. J.	936·68	·36867	·36865	+·00002	·36866	
„	„	15	8	2·7125	1·50	29·4	„	5·702	87·25	26	33	26	10	48	17	29·6	6·047	87·25	G. S. J.	936·25	·36845	·36844	+·00001	·36844	
„	29	12	49	2·7109	1·50	28·6	+0·8	5·922	87·55	26	34	20	10	48	42	28·6	5·966	87·55	G. S. J.	936·68	·36860	·36857	+·00003	·36858	
„	„	15	15	2·7117	1·50	27·7	„	5·311	87·50	26	35	45	10	49	12	27·9	5·633	87·50	G. S. J.	936·40	·36833	·36831	+·00002	·36832	

* Change in the magnetic conditions was noted on the 17th May due to a mishap, *vide* Introduction.

1915. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection of Magnet marked 7. Distance. 22·5 cms.	Angle of Deflection of Magnet marked 7. Distance. 30·0 cms.	Angle of Deflection of Magnet marked 7. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of H. Values of m.	Values of H. From Deflection at distance. 22·5 cms. ($H_{22\cdot5}$).	Values of H. From Deflection at distance. 30·0 cms. ($H_{30\cdot0}$).	Values of H. Difference. $H_{22\cdot5}-H_{30\cdot0}$	Values of H. Mean. $\frac{H_{22\cdot5}+H_{30\cdot0}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
Oct. 6	13 24	2·7093	1·50	29·1	+0·9	6·972	87·60	26 32 0	10 47 41	29·1	6·818	87·60	G. S. J.	936·74	0·36906	0·36906	0·00000	0·36906	
„ „	15 12	2·7109	1·50	29·0	„	6·461	87·60	26 32 30	10 47 59	29·0	6·590	87·60	G. S. J.	936·33	·36880	·36877	+·00003	·36878	
„ 13	13 9	2·7089	1·50	28·2	+0·8	7·105	87·40	26 32 35	10 47 53	28·3	6·936	87·40	G. S. J.	936·68	·36905	·36906	−·00001	·36905	
„ „	15 20	2·7098	1·50	28·4	„	6·607	87·40	26 32 47	10 48 4	28·4	6·751	87·40	G. S. J.	936·50	·36892	·36889	+·00003	·36890	0·368797
„ 20	12 58	2·7103	1·49	28·8	+1·2	6·447	87·15	26 34 32	10 48 44	28·8	5·833	87·15	G. S. J.	937·00	·36867	·36865	+·00002	·36866	
„ „	15 21	2·7133	1·51	29·0	„	4·746	87·15	26 36 36	10 49 35	29·0	4·743	87·15	G. S. J.	936·66	·36804	·36800	+·00004	·36802	
„ 27	12 32	2·7104	1·50	30·4	+0·9	6·939	87·77	26 31 2	10 47 20	30·3	6·747	87·77	G. S. J.	936·70	·36903	·36903	·00000	·36903	
„ „	14 36	2·7112	1·50	30·5	„	6·251	87·77	26 31 16	10 47 25	30·6	6·476	87·77	G. S. J.	936·57	·36888	·36888	·00000	·36888	
Nov. 3	13 44	2·7115	1·50	29·8	+1·1	6·096	87·65	26 33 12	10 48 11	29·6	5·963	87·65	G. S. J.	936·63	·36866	·36865	+·00001	·36865	
„ „	15 20	2·7120	1·51	30·1	„	5·785	87·67	26 33 8	10 48 12	29·9	5·865	87·67	G. S. J.	936·59	·36860	·36858	+·00002	·36859	
„ 10	12 51	2·7114	1·47	30·1	+1·3	6·635	87·87	26 32 8	10 47 52	30·0	6·178	87·87	G. S. J.	936·59	·36878	·36875	+·00003	·36876	
„ „	15 24	2·7121	1·48	30·6	„	5·915	87·87	26 32 15	10 47 53	30·2	6·051	87·87	G. S. J.	936·50	·36870	·36867	+·00003	·36868	·368542
„ 17	13 50	2·7133	1·51	29·4	+1·1	4·825	87·50	26 35 32	10 49 7	29·6	4·798	87·50	G. S. J.	936·57	·36813	·36810	+·00003	·36811	
„ „	15 24	2·7144	1·54	29·7	„	4·422	87·50	26 35 26	10 49 6	29·6	4·666	87·50	G. S. J.	936·25	·36803	·36800	+·00003	·36801	
„ 24	12 51	2·7122	1·49	31·5	+1·1	6·540	87·80	26 30 0	10 47 4	31·8	6·422	87·80	G. S. J.	936·44	·36886	·36882	+·00004	·36884	
„ „	15 17	2·7128	1·50	31·8	„	5·899	87·80	26 30 51	10 47 22	31·7	6·068	87·80	G. S. J.	936·50	·36872	·36869	+·00003	·36870	
Dec. 1	13 7	2·7102	1·50	30·1	+1·3	6·517	87·90	26 31 17	10 47 30	30·6	6·387	87·90	G. S. J.	936·87	·36899	·36896	+·00003	·36897	
„ „	15 17	2·7118	1·50	30·6	„	6·181	87·90	26 31 19	10 47 34	30·8	6·246	87·90	G. S. J.	936·50	·36878	·36875	+·00003	·36876	
„ 8	13 3	2·7098	1·50	26·3	+1·9	6·088	86·70	26 35 58	10 49 16	26·7	5·918	86·70	G. S. J.	936·53	·36855	·36854	+·00001	·36854	
„ „	15 18	2·7113	1·51	27·5	„	5·425	86·70	26 36 25	10 49 27	27·1	5·510	86·70	G. S. J.	936·48	·36837	·36835	+·00002	·36836	
„ 15	13 37	2·7088	1·48	26·0	+1·8	6·317	85·40	26 36 7	10 49 20	26·0	6·008	85·40	G. S. J.	936·70	·36871	·36870	+·00001	·36870	
„ „	15 7	2·7093	1·49	26·5	„	6·106	85·40	26 35 50	10 49 18	26·2	6·026	85·40	G. S. J.	936·63	·36870	·36865	+·00005	·36867	·368726
„ 22	12 38	2·7085	1·50	27·1	+1·9	7·097	84·61	26 33 36	10 48 25	27·5	6·867	84·61	G. S. J.	936·72	·36898	·36895	+·00003	·36896	
„ „	15 21	2·7099	1·50	27·9	„	6·605	84·60	26 33 58	10 48 35	27·8	6·576	84·60	G. S. J.	936·61	·36880	·36876	+·00004	·36878	
„ 29	13 42	2·7095	1·50	27·7	+1·3	6·807	84·20	26 34 1	10 48 32	27·6	6·681	84·20	G. S. J.	936·63	·36885	·36882	+·00003	·36883	
„ „	15 20	2·7104	1·50	27·8	„	6·469	84·20	26 34 10	10 48 40	27·7	6·516	84·20	G. S. J.	936·44	·36871	·36867	+·00004	·36869	
Mean of the months from June to December														936·56			+·000020		
The mean *observed value of the Horizontal Force for the year 1915 =																			·0·368823

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag—Table Ib.

Observations of Vibration and Deflection, taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.) for the determination of Absolute Horizontal Force.

1915.

1915. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection. Distance. 23 cms.	Angle of Deflection. Distance. 30 cms.	Angle of Deflection. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 23 cms. (H_{23})	Values of H. From Deflection at distance. 30 cms. (H_{30}).	Values of H. Difference. $H_{23}-H_{30}$	Values of H. Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
JAN. 4	13 23	2·8778	1·92	25·8	−0·3	7·895	83·85	23 38 2	10 25 16	25·8	7·618	83·85	G. S. J.	910·02	0·36894	0·36892	+·00002	0·36893	
„ „	15 29	2·8786	1·87	25·8	„	7·406	83·82	23 37 50	10 25 17	25·7	7·441	83·82	G. S. J.	909·75	·36888	·36882	+·00006	·36885	
„ 11	13 8	2·8769	1·93	24·8	−0·4	7·891	82·90	23 38 9	10 25 7	25·2	7·820	82·90	G. S. J.	909·93	·36901	·36905	−·00004	·36903	
„ „	15 31	2·8778	1·91	25·5	„	7·700	82·92	23 37 49	10 25 12	25·6	7·733	82·92	G. S. J.	909·85	·36896	·36893	+·00003	·36894	
„ 18	13 26	2·8772	1·98	25·4	−0·3	7·686	82·70	23 38 15	10 25 26	25·7	7·608	82·70	G. S. J.	910·21	·36896	·36891	+·00005	·36893	0·368901
„ „	15 32	2·8780	1·93	25·8	„	7·477	82·70	23 37 47	10 25 17	25·8	7·550	82·70	G. S. J.	909·93	·36894	·36888	+·00006	·36891	
„ 25	13 21	2·8785	1·92	26·6	−0·3	7·286	83·00	23 37 50	10 25 13	26·3	7·397	83·00	G. S. J.	910·04	·36889	·36886	+·00003	·36887	
„ „	15 28	2·8792	1·94	26·1	„	7·035	83·00	23 37 41	10 25 21	26·1	7·254	83·00	G. S. J.	909·68	·36879	·36871	+·00008	·36875	
FEB. 1	10 6	2·8777	1·91	25·4	−0·2	7·700	82·85	23 37 30	10 24 59	25·8	7·816	82·85	G. S. J.	909·79	·36898	·36897	+·00001	·36897	
„ „	11 50	2·8780	1·90	25·8	„	7·638	82·80	23 36 41	10 24 56	25·8	7·784	82·80	G. S. J.	909·66	·36908	·36899	+·00009	·36903	
„ 9	13 17	2·8777	1·96	25·0	−0·1	7·346	82·42	23 38 56	10 25 47	25·0	7·246	82·42	G. S. J.	910·02	·36884	·36877	+·00007	·36880	
„ „	16 31	2·8788	1·98	25·0	„	6·993	82·40	23 38 36	10 25 51	25·0	7·077	82·40	G. S. J.	909·64	·36874	·36862	+·00012	·36868	·368880
„ 15	12 59	2·8775	1·99	26·1	−0·3	7·986	82·20	23 37 16	10 25 3	26·3	7·654	82·20	G. S. J.	910·08	·36905	·36899	+·00006	·36902	
„ „	15 32	2·8792	2·03	26·3	„	7·185	82·20	23 37 44	10 25 20	26·3	7·261	82·20	G. S. J.	909·77	·36878	·36871	+·00007	·36874	
„ 22	13 22	2·8772	1·69	24·9	0·0	7·853	81·70	23 38 32	10 25 26	25·1	7·677	81·70	G. S. J.	910·04	·36896	·36894	+·00002	·36895	
„ „	15 29	2·8781	1·62	24·9	„	7·309	81·70	23 38 0	10 25 36	25·0	7·411	81·70	G. S. J.	909·72	·36892	·36879	+·00013	·36885	
MARCH 8	12 54	2·8790	1·60	27·7	+0·1	7·952	82·45	23 36 35	10 24 39	27·7	7·373	82·45	G. S. J.	910·08	·36898	·36895	+·00003	·36896	
„ „	15 35	2·8814	1·64	27·8	„	6·295	82·42	23 37 23	10 25 6	27·7	6·602	82·42	G. S. J.	909·62	·36858	·36853	+·00005	·36855	
„ 15	13 26	2·8772	1·66	26·7	0·0	8·248	82·75	23 36 12	10 24 35	26·4	8·091	82·75	G. S. J.	910·04	·36928	·36923	+·00005	·36925	
„ „	15 15	2·8781	1·63	26·7	„	7·826	82·75	23 35 26	10 24 26	26·6	7·935	82·75	G. S. J.	909·64	·36924	·36914	+·00010	·36919	
„ 22	13 24	2·8812	1·61	29·4	0·0	6·995	83·50	23 36 1	10 24 28	29·5	6·795	83·50	G. S. J.	910·00	·36875	·36871	+·00004	·36873	·368921
„ „	15 20	2·8824	1·60	29·5	„	6·381	83·55	23 35 37	10 24 20	29·7	6·540	83·55	G. S. J.	909·58	·36863	·36859	+·00004	·36861	
„ 29	13 1	2·8800	1·60	29·7	+0·1	7·945	84·50	23 34 43	10 23 51	29·2	7·615	84·50	G. S. J.	909·96	·36911	·36911	·00000	·36911	
„ „	15 32	2·8809	1·60	29·4	„	7·174	84·52	23 34 29	10 23 56	29·0	7·328	84·52	G. S. J.	909·54	·36901	·36894	+·00007	·36897	

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

1915. Date.	Civil Time, Mean.	Vibration Magnet. Time of one Vibration.	Vibration Magnet. Effect of 90° Torsion.	Vibration Magnet. Temperature.	Rate of Chronometer.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Angle of Deflection. Distance. 23 cms.	Angle of Deflection. Distance. 30 cms.	Angle of Deflection. Temperature.	Corresponding Mean Reading of H. F. Magnetograph. Ordinate.	Corresponding Mean Reading of H. F. Magnetograph. Thermometer.	Observer.	Calculated Results in C. G. S. Unit. Values of m.	Values of H. From Deflection at distance. 23 cms. (H_{23}).	Values of H. From Deflection at distance. 30 cms. (H_{30}).	Values of H. Difference. $H_{23}-H_{30}$	Values of H. Mean. $\frac{H_{23}+H_{30}}{2}$	*Observed monthly Mean Values of H.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	H. m.	S.	Sc. div.	°	S.	cms.	°	° ′ ″	° ′ ″	°	cms.	°							
April 5	13 28	2·8782	1·59	28·6	+0·3	8·290	85·50	23 34 25	10 23 49	28·3	7·943	85·50	G. S. J.	910·04	0·36937	0·36933	+·00004	0·36935	
„ „	15 34	2·8807	1·58	28·6	„	7·246	85·50	23 34 54	10 24 5	28·2	7·467	85·50	G. S. J.	909·39	·36899	·36894	+·00005	·36896	
„ 12	13 28	2·8800	1·62	29·6	+0·2	7·717	86·20	23 33 50	10 23 41	29·7	7·486	86·20	G. S. J.	909·85	·36917	·36910	+·00007	·36913	
„ „	15 37	2·8806	1·63	29·8	„	7·250	86·22	23 33 17	10 23 29	29·8	7·353	86·22	G. S. J.	909·56	·36916	·36908	+·00008	·36912	0·368835
„ 19	12 54	2·8831	1·64	30·8	+0·1	6·366	87·20	23 34 54	10 24 1	30·9	6·377	87·20	G. S. J.	909·66	·36864	·36860	+·00004	·36862	
„ „	15 30	2·8832	1·62	31·1	„	6·507	87·20	23 33 42	10 23 36	31·1	6·568	87·20	G. S. J.	909·43	·36878	·36871	+·00007	·36874	
„ 26	13 14	2·8813	1·61	30·0	+0·3	6·810	88·05	23 35 55	10 24 23	29·8	6·182	88·05	G. S. J.	910·10	·36877	·36874	+·00003	·36875	
„ „	15 31	2·8852	1·64	30·0	„	4·997	88·05	23 37 41	10 25 20	29·7	4·961	88·05	G. S. J.	909·45	·36805	·36798	+·00007	·36801	
								Mean of	the months	from Ja	nuary to	April		909·81			+·000053		
May 3	12 33	2·8814	1·63	30·8	+0·3	7·271	88·75	23 34 3	10 23 41	29·9	6·857	88·75	A.	909·75	·36905	·36899	+·00006	·36902	
„ „	15 5	2·8824	1·62	30·3	„	6·731	88·75	23 34 35	10 24 2	29·6	6·685	88·75	A.	909·45	·36884	·36875	+·00009	·36879	
„ 10	12 57	2·8798	1·62	31·1	+0·4	7·378	89·00	23 33 34	10 23 34	30·8	7·001	89·00	A.	910·40	·36926	·36918	+·00008	·36922	
„ „	14 27	2·8824	1·62	31·1	„	6·903	89·00	23 33 7	10 23 26	30·8	6·873	89·00	A.	909·45	·36898	·36889	+·00009	·36893	
„ 17	12 44	2·8878	1·62	31·1	+0·4	6·416	89·55	23 29 40	10 21 57	30·6	5·965	89·55	A.	†906·63	·36873	·36865	+·00008	·36869	·368997
„ „	14 32	2·8883	1·61	31·0	„	5·847	89·55	23 29 57	10 22 5	30·7	5·857	89·55	A.	906·59	·36861	·36853	+·00008	·36857	
„ 24	13 4	2·8865	1·62	31·6	+0·4	7·500	89·90	23 26 36	10 20 47	31·4	7·362	89·90	A.	906·44	·36925	·36913	+·00012	·36919	
„ „	13 54	2·8867	1·62	31·7	„	6·930	89·90	23 26 15	10 20 30	31·5	7·225	89·90	A.	906·30	·36926	·36918	+·00008	·36922	
„ 31	13 30	2·8867	1·61	31·3	+0·3	7·217	90·65	23 26 40	10 20 45	31·2	7·141	90·65	A.	906·27	·36920	·36911	+·00009	·36915	
„ „	14 51	2·8862	1·62	31·8	„	6·827	90·65	23 27 15	10 20 55	31·2	7·026	90·65	A.	906·69	·36923	·36916	+·00007	·36919	
June 7	13 25	2·8863	1·96	32·0	+0·6	7·242	91·30	23 27 5	10 20 41	31·6	6·987	91·30	G. S. J.	906·63	·36921	·36918	+·00003	·36919	
„ „	15 31	2·8877	2·03	31·8	„	6·702	91·35	23 26 51	10 20 49	31·6	6·808	91·35	G. S. J.	906·15	·36904	·36894	+·0001	·36899	
„ 14	13 38	2·8861	2·46	31·8	+0·3	6·587	91·75	23 27 56	10 21 3	31·6	6·405	91·75	G. S. J.	906·84	·36907	·36905	+·00002	·36906	
„ „	15 38	2·8881	2·51	31·8	„	5·867	91·70	23 27 52	10 21 12	31·6	6·085	91·70	G. S. J.	906·23	·36882	·36874	+·00008	·36878	
„ 21	13 18	2·8863	2·05	29·9	+0·8	6·065	91·75	23 30 21	10 22 10	29·6	5·810	91·75	G. S. J.	906·73	·36880	·36873	+·00007	·36876	·368872
„ „	15 30	2·8875	2·02	29·3	„	5·153	91·70	23 30 57	10 22 30	29·1	5·380	91·70	G. S. J.	906·34	·36856	·36848	+·00008	·36852	
„ 28	13 23	2·8838	1·99	27·2	+0·2	6·645	90·20	23 31 7	10 22 31	27·1	6·488	90·20	G. S. J.	906·65	·36902	·36894	+·00008	·36898	
„ „	15 30	2·8856	1·90	27·3	„	5·912	89·95	23 31 57	10 22 45	26·8	6·122	89·95	G. S. J.	906·27	·36872	·36869	+·00003	·36870	
July 5	12 38	2·8850	1·79	29·5	+1·2	7·253	88·50	23 28 17	10 21 24	29·2	7·054	88·50	G. S. J.	906·42	·36923	·36915	+·00008	·36919	
„ „	15 26	2·8862	1·81	29·1	„	6·353	88·50	23 28 32	10 21 37	29·3	6·608	88·50	G. S. J.	906·11	·36901	·36888	+·00013	·36894	
„ 12	13 58	2·8871	1·77	28·8	+0·6	6·050	88·22	23 30 42	10 22 16	28·9	6·035	88·22	G. S. J.	906·25	·36864	·36859	+·00005	·36861	
„ „	15 35	2·8876	1·78	29·0	„	5·565	88·22	23 30 22	10 22 16	29·0	5·920	88·22	G. S. J.	906·09	·36861	·36853	+·00008	·36857	
„ 19	13 40	2·8838	1·76	29·3	+0·8	7·566	88·40	23 28 1	10 21 11	29·3	7·325	88·40	G. S. J.	906·65	·36939	·36933	+·00006	·36936	·368955
„ „	15 27	2·8858	1·80	29·4	„	6·608	88·40	23 27 51	10 21 13	29·4	6·975	88·40	G. S. J.	906·05	·36915	·36906	+·00009	·36910	
„ 26	13 3	2·8853	1·74	29·5	+0·7	7·120	87·70	23 29 0	10 21 33	29·2	6·986	87·70	G. S. J.	906·50	·36911	·36906	+·00005	·36908	
„ „	15 20	2·8866	1·75	28·9	„	6·327	87·70	23 29 41	10 21 55	29·0	6·721	87·70	G. S. J.	906·17	·36882	·36876	+·00006	·36879	

Aug.	2	13	26	2·8856	1·71	28·7	+0·8	6·552	86·60	23	31	2	10	23	31	28·2	6·072	86·6	G. S. J.	906·71	·36880	·36877	+·00003	·36878
„	„	15	23	2·8876	1·71	28·3	„	5·321	86·00	23	31	54	10	23	0	28·4	5·520	86·00	G. S. J.	906·30	·36844	·36832	+·00011	·36837
„	9	12	37	2·8857	1·69	28·6	+0·5	6·903	86·00	23	29	54	10	22	6	28·5	6·862	86·00	G. S. J.	906·38	·36894	·36884	+·00010	·36889
„	„	15	18	2·8858	1·70	28·7	„	6·722	86·00	23	29	32	10	22	1	28·6	6·718	86·00	G. S. J.	906·32	·36897	·36885	+·00012	·36891
„	16	12	54	2·8845	1·67	29·4	+0·9	7·733	85·87	23	27	51	10	21	9	29·1	7·666	85·87	G. S. J.	906·40	·36936	·36928	+·00008	·36932
„	„	15	13	2·8850	1·69	29·0	„	7·245	85·90	23	28	20	10	21	23	28·9	7·359	85·90	G. S. J.	906·27	·36921	·36913	+·00008	·36917 } ·368888
„	23	13	20	2·8850	1·69	28·5	+0·4	7·152	86·55	23	29	29	10	21	55	28·1	6·837	86·55	G. S. J.	906·34	·36911	·36900	+·00011	·36905
„	„	15	22	2·8856	1·69	28·2	„	6·546	86·50	23	30	18	10	22	9	28·0	6·608	86·50	G. S. J.	906·27	·36891	·36884	+·00007	·36887
„	30	12	59	2·8859	1·71	28·8	+0·8	6·606	86·45	23	30	11	10	22	17	28·6	6·439	86·45	G. S. J.	906·48	·36888	·36877	+·00011	·36882
„	„	15	2	2·8865	1·69	28·7	„	6·116	86·30	23	30	51	10	22	17	28·6	6·122	86·30	G. S. J.	906·40	·36871	·36869	+·00002	·36870
Sept.	6	12	45	2·8840	1·68	28·8	+0·6	7·788	86·40	23	28	7	10	21	19	28·5	7·639	86·40	G. S. J.	906·40	·36939	·36930	+·00009	·36934
„	„	14	30	2·8854	1·72	28·7	„	7·085	86·40	23	28	23	10	21	24	28·5	7·424	86·40	G. S. J.	906·00	·36916	·36909	+·00007	·36912
„	13	13	25	2·8840	1·70	28·5	+1·0	7·361	86·85	23	29	0	10	21	31	28·3	7·240	86·85	G. S. J.	906·50	·36928	·36924	+·00004	·36926
„	„	15	6	2·8854	1·7	28·4	„	6·980	86·87	23	28	31	10	21	24	28·4	7·167	86·87	G. S. J.	906·94	·36914	·36908	+·00006	·36911
„	20	13	11	2·8850	1·55	29·6	+0·5	7·421	87·10	23	28	40	10	21	24	29·1	7·163	87·10	G. S. J.	906·53	·36922	·36917	+·00005	·36919 } ·369026
„	„	15	1	2·8856	1·52	29·3	„	6·786	87·12	23	28	19	10	21	25	29·2	7·000	87·12	G. S. J.	906·23	·36915	·36905	+·00010	·36910
„	27	12	49	2·8881	1·56	29·8	+0·8	5·733	87·50	23	31	15	10	22	29	29·4	5·663	87·50	G. S. J.	906·46	·36849	·36845	+·00004	·36847
„	„	15	20	2·8879	1·56	29·7	„	5·920	87·52	23	29	51	10	22	6	29·6	5·871	87·52	G. S. J.	906·19	·36867	·36857	+·00010	·36862
Oct.	4	13	10	2·8860	1·53	29·1	+·08	6·762	87·65	23	29	37	10	21	41	29·0	6·601	87·65	G. S. J.	906·34	·36894	·36893	+·00001	·36893
„	„	15	33	2·8868	1·53	29·0	„	6·331	87·60	23	29	17	10	21	52	29·0	6·397	87·60	G. S. J.	906·07	·36887	·36877	+·00010	·36882
„	11	13	10	2·8847	1·53	28·1	+·8	6·845	87·40	23	30	7	10	22	0	27·9	6·638	87·40	G. S. J.	906·48	·36906	·36902	+·00004	·36904
„	„	15	24	2·8867	1·55	27·8	„	5·858	87·40	23	30	50	10	22	22	27·7	6·188	87·40	G. S. J.	905·98	·36871	·36865	+·00006	·36868 } ·368747
„	18	12	41	2·8843	1·56	28·4	+1·1	7·241	87·20	23	29	27	10	21	53	28·1	6·902	87·20	G. S. J.	906·57	·36921	·36912	+·00009	·36916
„		15	15	2·8862	1·59	28·4	„	6·213	87·20	23	29	52	10	22	5	28·4	6·361	87·20	G. S. J.	906·17	·36888	·36879	+·00009	·36883
„	25	15	58	2·8884	1·61	30·8	+1·0	5·470	87·75	23	31	12	10	22	29	30·7	4·925	87·75	G. S. J.	906·86	·36843	·36838	+·00005	·36840
„	„	14	39	2·8910	1·60	30·7	„	4·641	87·70	23	30	36	10	22	20	30·8	4·850	87·70	G. S. J.	905·90	·36816	·36809	+·00007	·36812
Nov.	2	12	32	2·8877	1·61	30·1	+1·0	6·098	87·67	23	29	29	10	21	55	30·1	5·811	87·67	G. S. J.	906·34	·36873	·36864	+·00009	·36868
„	„	15	24	2·8889	1·63	29·9	„	5·319	87·70	23	30	25	10	22	15	29·9	5·287	87·70	G. S. J.	906·13	·36847	·36838	+·00009	·36842
„	15	13	13	2·8854	1·66	29·2	+1·3	7·078	87·55	23	28	49	10	21	28	28·8	6·797	87·55	G. S. J.	906·30	·36914	·36910	+·00004	·36912
„	„	15	25	2·8866	1·62	29·3	„	6·51[illegible]	87·52	23	28	26	10	21	31	29·0	6·648	87·52	G. S. J.	905·94	·36903	·36892	+·00011	·36897
„	23	13	15	2·8878	1·66	31·2	+1·1	6·305	87·80	23	28	46	10	21	35	30·4	6·047	87·80	G. S. J.	906·36	·36887	·36878	+·00009	·36882 } ·368796
„	„	15	25	2·8885	1·65	30·5	„	5·575	87·80	23	29	16	10	21	43	30·3	5·740	87·80	G. S. J.	906·11	·36866	·36860	+·00006	·36863
„	29	13	14	2·8872	1·66	31·0	+1·2	6·511	87·97	23	28	25	10	21	7	30·8	6·405	87·97	G. S. J.	906·36	·36893	·36894	−·00001	·36893
„	„	15	24	2·8885	1·62	30·8	„	6·015	87·95	23	27	34	10	21	10	30·9	6·242	87·95	G. S. J.	905·84	·36886	·36875	+·00011	·36880
Dec.	6	13	21	2·8841	1·88	26·8	+1·5	6·787	87·00	23	31	0	10	22	17	26·4	6·635	87·00	G. S. J.	906·25	·36904	·36902	+·00002	·36903
„	„	15	18	2·8857	1·92	26·8	„	5·545	87·05	23	31	45	10	22	42	26·5	6·265	87·05	G. S. J.	906·05	·36873	·36869	+·00004	·36871
„	13	13	13	2·8846	1·76	26·1	+1·8	6·253	85·80	23	32	11	10	23	2	26·0	6·327	85·80	G. S. J.	906·34	·36881	·36871	+·00010	·36876
„	„	15	8	2·8847	1·79	26·5	„	6·485	85·80	23	31	41	10	22	52	26·0	6·400	85·80	G. S. J.	906·25	·36889	·36879	+·00010	·36884 } ·368826
„	20	13	36	2·8855	1·85	27·6	+1·8	6·392	84·80	23	30	52	10	22	18	27·8	6·340	84·80	G. S. J.	906·30	·36882	·36878	+·00004	·36880
„	„	15	19	2·8856	1·86	27·8	„	6·390	84·80	23	30	20	10	22	11	27·9	6·416	84·80	G. S. J.	906·19	·36888	·36881	+·00007	·36884
„	27	13	26	2·8845	1·78	27·1	+1·7	6·753	84·35	23	30	43	10	22	17	27·3	6·647	84·35	G. S. J.	906·36	·36897	·36892	+·00005	·36894
„	„	15	28	2·8865	1·69	27·5	„	6·055	84·37	23	30	48	10	22	35	27·2	6·356	84·37	G. S. J.	905·94	·36876	·36863	+·00013	·36869
																			Mean of the months from June to December	906·30			+·000071	
																			The mean* observed value of the Horizontal Force for the year 1915=					0·368887

*The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

† Change in the magnet conditions was noted on the 17th May due to a mishap, *vide* Introduction.

Absolute Magnetical Observations, Alibag—Table IIa.

OBSERVATIONS OF ABSOLUTE DECLINATION, 1915.

Taken with Magnetometer No. 7 (T. Cooke and Sons.)

1915. Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently. Erect.	Inverted.	Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Kennery Light House.	Torsion. Mean.	Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	*Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JAN. 7	12 40	55·6	..	85 10 15	222 23 5	0	..	G. S. J	4·740	0 40 35		
„ 15	13 1	55·6	..	85 11 15	222 22 55	0	..	G. S. J.	4·885	0 41 45		
„ 21	12 44	55·6	..	85 10 40	222 22 40	0	..	G. S. J.	4·832	0 41 25	4·852	0 41 29
„ 28	13 26	55·6	..	85 11 25	222 22 40	0	..	G. S. J.	4·950	0 42 10		
FEB. 4	11 42	55·6	..	85 8 30	222 22 40	0	..	G. S. J.	4·627	0 39 15		
„ 11	13 15	55·6	..	85 10 55	222 22 45	0	..	G. S. J.	4·935	0 41 35	4·777	0 40 8
„ 18	12 53	55·6	..	85 9 20	222 22 50	0	..	G. S. J.	4·772	0 39 55		
„ 25	12 52	55·6	..	85 9 15	222 22 50	0	..	G. S. J.	4·775	0 39 50		
MARCH 4	12 21	55·6	..	85 8 35	222 22 40	0	..	G. S. J.	4·732	0 39 20		
„ 11	12 37	55·6	..	85 9 15	222 23 0	0	..	G. S. J.	4·800	0 39 40		
„ 18	12 36	55·6	..	85 10 10	222 22 55	0	..	G. S. J.	4·897	0 40 40	4·810	0 39 54
„ 26	12 53	55·6	..	85 9 30	222 23 0	0	..	G. S. J.	4·810	0 39 55		
APRIL 1	12 3	55·6	..	85 9 55	222 22 55	0	..	G. S. J.	4·845	0 40 25		
„ 8	12 56	55·6	..	85 8 15	222 23 5	0	..	G. S. J.	4·692	0 38 35		
„ 15	12 6	55·6	..	85 7 40	222 23 5	0	..	G. S. J.	4·610	0 38 0	4·715	0 39 5
„ 22	13 5	55·6	..	85 8 30	222 23 5	0	..	G. S. J.	4·710	0 38 50		
„ 29	13 14	55·6	..	85 9 20	222 23 10	0	..	G. S. J.	4·717	0 39 35		
MAY 6	12 58	55·6	..	85 10 30	222 23 20	0	..	A	4·790	0 40 35		
„ 13	12 34	55·6	..	85 8 30	222 23 20	0	..	A.	4·627	0 38 35		
„ 20	12 34	55·6	..	85 8 35	222 23 25	0	..	A.	4·632	0 38 35	4·683	0 39 19
„ 27	12 2	55·6	..	85 9 20	222 23 15	0	..	A.	4·685	0 39 30		
JUNE 3	12 37	55·6	..	85 8 15	222 22 55	0	..	G. S. J.	4·650	0 38 45		
„ 10	12 18	55·6	..	85 8 10	222 23 0	0	..	G. S. J.	4·637	0 38 35		
„ 17	13 15	55·6	..	85 7 45	222 23 10	0	..	G. S. J.	4·550	0 38 0	4·580	0 38 14
„ 24	12 23	55·6	..	85 7 5	222 22 55	0	..	G. S. J.	4·485	0 37 35		
JULY 1	12 58	55·6	..	85 9 15	222 22 55	0	..	G. S. J.	4·710	0 39 45		
„ 8	11 58	55·6	..	85 8 0	222 23 15	0	..	G. S. J.	4·537	0 38 10		
„ 15	12 56	55·6	..	85 5 20	222 23 15	0	..	G. S. J.	4·337	0 35 30	4·536	0 37 47
„ 22	12 48	55·6	..	85 8 5	222 23 20	0	..	G. S. J.	4·585	0 38 10		
„ 29	13 23	55·6	..	85 7 20	222 23 25	0	..	G. S. J.	4·510	0 37 20		
AUG. 5	13 37	55·6	..	85 8 0	222 23 30	0	..	G. S. J.	4·610	0 37 55		
„ 12	12 17	55·6	..	85 7 25	222 23 35	0	..	G. S. J.	4·572	0 37 15		
„ 19	12 1	55·6	..	85 8 0	222 23 40	0	..	G. S. J.	4·607	0 37 45	4·583	0 37 25
„ 26	12 5	55·6	..	85 6 45	222 23 25	0	..	G. S. J.	4·542	0 36 45		
SEPT. 3	12 28	55·6	..	85 7 10	222 23 35	0	..	G. S. J.	4·567	0 37 0		
„ 10	12 14	55·6	..	85 6 15	222 23 35	0	..	G. S. J.	4·490	0 36 5		
„ 16	12 50	55·6	..	85 7 15	222 23 35	0	..	G. S. J.	4·580	0 37 5	4·604	0 37 16
„ 23	11 49	55·6	..	85 7 40	222 23 30	0	..	G. S. J.	4·640	0 37 35		
„ 30	13 15	55·6	..	85 8 40	222 23 30	0	..	G. S. J.	4·742	0 38 35		
OCT. 7	12 18	55·6	..	85 8 55	222 23 40	0	..	G. S. J.	4·755	0 38 40		
„ 15	11 59	55·6	..	85 8 20	222 23 30	0	..	G. S. J.	4·700	0 38 15		
„ 21	11 47	55·6	..	85 9 5	222 23 35	0	..	G. S. J.	4·770	0 38 55	..	0 38 24
„ 28	12 9	55·6	..	85 8 0	222 23 40	0	..	G. S. J.	†3·962	0 37 45		
NOV. 4	12 18	55·6	..	85 8 20	222 23 55	0	..	G. S. J.	4·020	0 37 50		
„ 11	12 40	55·6	..	85 8 50	222 23 35	0	..	G. S. J.	4·075	0 38 40		
„ 18	12 11	55·6	..	85 8 10	222 23 30	0	..	G. S. J.	4·022	0 38 5	4·047	0 38 25
„ 25	12 56	55·6	..	85 8 45	222 23 5	0	..	G. S. J.	4·070	0 39 [illegible]		
DEC. 2	11 58	55·6	..	85 6 30	222 23 5	0	..	G. S. J.	3·870	0 36 50		
„ 9	12 50	55·6	..	85 8 40	222 22 55	0	..	G. S. J.	4·150	0 39 10		
„ 16	12 38	55·6	..	85 8 30	222 22 55	0	..	G. S. J.	4·125	0 39 0	4·035	0 38 6
„ 23	12 48	55·6	..	85 8 30	222 23 5	0	..	G. S. J.	4·117	0 38 50		
„ 30	12 50	55·6	..	85 6 20	222 23 5	0	..	G. S. J.	3·915	0 36 40		

The mean* observed Declination for the year 1915 = 0 ° 38 ′ 48 ″

* The monthly and annual means corrected for diurnal variation appear in Table VIII

† Adjustment of the zero mirror of Declination Magnetograph on the 25th October.

Note.—As in the magnet of Instrument No. 7, there is no provision for observing the scale in the inverted position, a constant correction has been once for all determined from a large number of experiments and applied throughout to the Declination obtained from the erect position.

Absolute Magnetical Observations, Alibag—Table IIb.

OBSERVATIONS ABSOLUTE DECLINATION, 1915.

Taken with Magnetometer No. 3 (Cambridge Scientific Instrument Co.)

1915 Date.	Alibag Civil Time.	Mean Readings. Collimator Magnet. Scale apparently. Erect.	Inverted.	Horizontal Circle with Telescope pointed to. Scale of Collimator Magnet.	Kennery Light House.	Torsion. Mean.	Effect of 90°.	Observer.	Corresponding Reading of Declination Magnetograms.	Absolute Easterly Declination corrected for Torsion.	Monthly Mean. Corresponding Reading of Declination Magnetograms.	*Observed absolute Easterly Declination.
1	2	3	4	5	6	7	8	9	10	11	12	13
	H. m.	Sc. div.	Sc. div.	° ′ ″	° ′ ″	°	Sc. div.		cms.	° ′ ″	cms.	° ′ ″
JAN. 7	13 13	35·00	34·55	276 8 35	53 21 25	0	..	G. S. J.	4·760	0 41 0		
„ 15	13 39	34·97	34·65	276 9 40	53 21 10	0	..	G. S. J.	4·901	0 42 13		
„ 21	13 13	34·95	34·65	276 9 15	53 21 10	0	..	G. S. J.	4·891	0 41 47	4·884	0 41 58
„ 28	14 5	34·97	34·72	276 10 25	53 21 10	0	..	G. S. J.	4·984	0 42 54		
FEB. 4	12 39	35·02	34·40	276 7 40	53 21 5	0	..	G. S. J.	4·788	0 40 36		
„ 11	14 10	35·00	34·55	276 9 10	53 21 0	0	..	G. S. J.	4·950	0 42 0	4·844	0 40 53
„ 18	13 28	35·02	34·40	276 8 15	53 21 15	0	..	G. S. J.	4·849	0 41 1		
„ 25	13 24	35·00	34·65	276 7 15	53 21 5	0	..	G. S. J.	4·788	0 39 54		
MAR. 4	14 26	35·00	34·65	276 7 55	53 21 10	0	..	G. S. J.	4·888	0 40 29		
„ 11	13 10	35·00	34·67	276 7 40	53 21 20	0	..	G. S. J.	4·819	0 40 3	4·848	0 40 18
„ 18	13 11	34·87	34·87	276 8 15	53 21 20	0	..	G. S. J.	4·867	0 40 20		
„ 26	13 28	35·05	34·60	276 7 50	53 21 20	0	..	G. S. J.	4·818	0 40 20		
APRIL 1	12 33	34·97	34·95	276 8 15	53 21 25	0	..	G. S. J.	4·775	0 40 16		
„ 8	13 26	35·07	34·60	276 6 45	53 21 15	0	..	G. S. J.	4·705	0 39 21		
„ 15	12 46	34·92	34·85	276 7 0	53 21 30	0	..	G. S. J.	4·638	0 38 58	4·728	0 39 42
„ 22	13 36	35·10	34·80	276 7 40	53 21 20	0	..	G. S. J.	4·760	0 40 2		
„ 29	14 4	34·92	34·67	276 7 35	53 21 20	0	..	G. S. J.	4·761	0 39 54		
MAY 6	13 27	35·00	34·75	276 8 0	53 21 15	0	..	A.	4·806	0 40 24		
„ 13	13 9	35·00	34·60	276 5 50	53 21 35	0	..	A.	4·596	0 38 3		
„ 20	13 10	35·00	34·85	276 6 10	53 21 35	0	..	A.	4·626	0 38 8	4·684	0 38 59
„ 27	12 34	35·12	34·57	276 7 15	53 21 50	0	..	A.	4·710	0 39 21		
JUNE 3	13 12	35·05	34·87	276 6 40	53 21 30	0	..	G. S. J.	4·675	0 38 45		
„ 10	12 57	35·02	34·85	276 6 45	53 21 40	0	..	G. S. J.	4·615	0 38 39	4·595	0 38 28
„ 17	13 50	35·02	34·57	276 6 25	53 21 40	0	..	G. S. J.	4·578	0 38 35		
„ 24	13 6	35·00	34·70	276 5 35	53 21 25	0	..	G. S. J.	4·512	0 37 52		
JULY 1	13 38	34·92	34·85	276 7 55	53 21 40	0	..	G. S. J.	4·682	0 39 43		
„ 8	12 36	34·95	34·82	276 5 55	53 21 50	0	..	G. S. J.	4·493	0 37 37		
„ 15	13 32	35·02	34·72	276 4 5	53 21 50	0	..	G. S. J.	4·406	0 35 57	4·548	0 39 47
„ 22	13 14	34·95	34·85	276 6 55	53 22 10	0	..	G. S. J.	4·605	0 38 16		
„ 29	13 59	35·10	34·70	276 5 55	53 22 15	0	..	G. S. J.	4·552	0 37 28		
AUG. 5	14 16	35·10	34·82	276 7 40	53 22 25	0	..	G. S. J.	4·690	0 38 56		
„ 12	12 50	35·00	35·07	276 6 45	53 22 15	0	..	G. S. J.	4·609	0 37 52	4·621	0 37 50
„ 19	12 36	35·02	34·87	276 6 5	53 22 15	0	..	G. S. J.	4·595	0 37 23		
„ 26	13 16	35·05	34·85	276 5 55	53 22 15	0	..	G. S. J.	4·592	0 37 16		
SEPT. 3	13 6	34·92	35·02	276 6 45	53 22 20	0	..	G. S. J.	4·612	0 37 44		
„ 10	12 49	35·00	34·90	276 4 55	53 22 15	0	..	G. S. J.	4·506	0 36 11		
„ 16	13 21	34·92	34·87	276 6 10	53 22 20	0	..	G. S. J.	4·573	0 37 17	4·615	0 37 31
„ 23	12 29	35·00	34·85	276 6 25	53 22 30	15E.	0·62	G. S. J.	4·622	0 37 16		
„ 30	13 41	35·00	34·90	276 8 10	53 22 35	0	..	G. S. J.	4·763	0 39 6		
OCT. 7	12 52	35·00	34·90	276 8 0	53 22 45	0	..	G. S. J.	4·760	0 38 46		
„ 15	12 38	35·00	34·75	276 7 45	53 22 45	0	..	G. S. J.	4·722	0 38 39	..	0 38 42
„ 21	12 20	35·00	34·95	276 8 0	53 22 40	0	..	G. S. J.	4·753	0 38 47		
„ 28	12 51	35·00	35·00	276 8 5	53 22 55	0	..	G. S. J.	†4·045	0 38 35		
NOV. 4	12 58	35·02	34·72	276 7 40	53 23 5	0	..	G. S. J.	4·052	0 38 17		
„ 11	13 12	35·00	34·17	276 7 20	53 22 35	0	..	G. S. J.	4·102	0 38 57		
„ 18	12 51	34·85	34·65	276 8 20	53 22 40	0	..	G. S. J.	4·107	0 39 16	4·098	0 38 59
„ 25	13 28	35·00	34·42	276 8 0	53 22 30	0	..	G. S. J.	4·132	0 39 28		
DEC. 2	12 31	35·17	34·02	276 5 35	53 22 30	0	..	G. S. J.	3·933	0 37 35		
„ 9	13 29	34·95	34·40	276 7 40	53 22 25	0	..	G. S. J.	4·134	0 39 11		
„ 16	13 13	35·02	34·10	276 7 40	53 22 25	0	..	G. S. J.	4·177	0 39 33	4·068	0 38 22
„ 23	13 21	35·07	34·02	276 6 20	53 22 10	0	..	G. S. J.	4·117	0 38 35		
„ 30	13 38	34·90	34·30	276 5 20	53 22 25	0	..	G. S. J.	3·978	0 36 54		

The mean * observed Declination for the year 1915 = 0° 39′ 17″

* The monthly and annual means corrected for diurnal variation appear in Table VIIIa.

† Adjustment of the zero mirror of the Declination Magnetograph on the 25th October.

Absolute Magnetical Observations, Alibag—Table IIIa.

Observations of Inclination, 1915.

Taken with Inductor No. 41 by Schulze and Galvanometer No. 200 By Plath.

1915. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	* Monthly mean Inclination. °	′
JANY.	2	11	36	11	52	G. S. J. and G. P.	24	17·16	24	17·66	24	17·41		
,,	4	11	26	11	44	G. P. and G. S. J.	24	16·67	24	16·44	24	16·55		
,,	6	11	29	11	46	G. S. J. and G. P.	24	15·68	24	15·91	24	15·79		
,,	8	11	35	11	54	G. S. J. and G. P.	24	13·62	24	13·90	24	13·76		
,,	9	11	28	11	46	G. P. and G. S. J.	24	15·81	24	15·26	24	15·53		
,,	11	11	31	11	52	G. S. J. and G. P.	24	14·87	24	15·40	24	15·13		
,,	13	11	47	12	3	G. P. and G. S. J.	24	16·48	24	16·04	24	16·26		
,,	15	11	41	12	8	G. P. and G. S. J.	24	17·12	24	17·23	24	17·17		
,,	16	11	31	11	51	G. S. J. and G. P.	24	16·34	24	16·85	24	16·59	24	16·36
,,	18	11	5	11	31	G. P. and G. S. J.	24	15·83	24	15·15	24	15·49		
,,	20	11	37	11	57	G. S J and G. P.	24	14·94	24	15·85	24	15·39		
,,	22	11	50	12	8	G. S. J. and G. P.	24	15·33	24	16·02	24	15·67		
,,	23	11	45	12	2	G. P. and G. S. J.	24	17·04	24	17·32	24	17·18		
,,	25	11	32	11	46	G. S. J. and G. P.	24	16·71	24	17·41	24	17·06		
,,	27	11	7	11	22	G. P. and G. S. J.	24	17·63	24	17·81	24	17·72		
,,	29	11	34	11	51	G. P. and G, S. J.	24	17·38	24	17·48	24	17·43		
,,	30	11	38	12	0	G. S. J. and G. P.	24	17·80	24	18·05	24	17·92		
FEB.	1	14	15	14	26	G. S. J. and G. P.	24	18·15	24	18·69	24	18·42		
,,	1	14	41	15	1	G. S. J. and G. P.	24	18·03	24	18·63	24	18·33		
,,	2	14	10	14	26	G. S. J. and G. P.	24	19·11	24	19·61	24	19·36		
,,	2	14	37	14	49	G. S. J. and G. P.	24	19·15	24	19·25	24	19·20		
,,	3	14	15	14	31	G. S. J. and G. P.	24	17·72	24	18·41	24	18·06		
,,	3	14	44	14	56	G. S. J. and G. P.	24	17·92	24	18·38	24	18·15		
,,	4	14	15	14	30	G. S. J. and G. P.	24	17·37	24	17·81	24	17·59		
,,	4	14	41	14	56	G. S. J. and G. P.	24	17·95	24	18·04	24	17·99		
,,	5	14	2	14	16	G. S. J. and G. P.	24	18·22	24	18·71	24	18·46		
,,	5	14	26	14	39	G. S. J. and G. P.	24	18·16	24	18·45	24	18·30		
,,	6	12	51	13	5	G. P. and G. S. J.	24	15·75	24	15·84	24	15·79		
,,	8	15	42	16	0	G. P.	24	17·67	24	17·68	24	17·67		
,,	10	11	24	12	16	G. P. and G. S. J.	24	17·47	24	17·44	24	17·45	24	17·45
,,	13	12	35	12	52	G. S. J. and G. P.	24	16·55	24	17·18	24	16·86		
,,	15	11	14	11	29	G. P. and G. S. J.	24	15·88	24	16·03	24	15·95		
,,	17	11	42	11	58	G. S. J. and G. P.	24	16·04	24	16·55	24	16·29		
,,	19	11	49	12	13	G. S. J. and G. P.	24	15·67	24	15·68	24	15·67		
,,	20	11	17	11	35	G. P. and G. S. J.	24	16·90	24	16·91	24	16·90		
,,	22	11	35	11	52	G. S. J. and G. P.	24	16·13	24	16·45	24	16·29		
,,	24	11	21	11	36	G. P. andG. S. J.	24	16·12	24	16·10	24	16·11		
,,	26	11	28	11	48	G. P. and G. S. J.	24	16·42	24	16·42	24	16·42		
,,	27	13	2	13	15	G. S. J. and G. P.	24	18·34	24	18·78	24	18·56		
MARCH	3	11	28	11	45	G. S. J. and G. P.	24	15·79	24	15·54	24	15·66		
,,	5	11	36	11	53	G. S. J. and G. P.	24	15·37	24	15·64	24	15·50		
,,	6	11	18	11	33	G. P. and G. S. J.	24	15·75	24	15·69	24	15·72		
,,	8	11	24	11	42	G. S. J. and G. P.	24	15·58	24	15·51	24	15·54		
,,	10	11	10	11	30	G. P. and G. S. J.	24	16·40	24	15·81	24	16·10		
,,	12	11	35	11	53	G. P. and G. S. J.	24	15·89	24	15·96	24	15·92		
,,	13	12	0	12	16	G. S. J. and G. P.	24	14·90	24	15·70	24	15·30		
,,	15	11	27	11	44	G. P. and G. S. J.	24	15·47	24	15·84	24	15·65		
,,	17	11	29	11	46	G. S. J. and G. P.	24	16·00	24	16·57	24	16·28	24	16·21
,,	19	11	50	12	7	G. S. J. and G. P.	24	16·35	24	16·81	24	16·58		
,,	20	11	31	11	52	G. P. and G. S. J.	24	16·27	24	16·54	24	16·40		
,,	22	11	34	11	50	G. S. J. and G. P.	24	17·24	24	18·04	24	17·64		
,,	24	11	22	11	38	G. P. and G. S. J.	24	16·97	24	17·18	24	17·07		
,,	26	11	18	11	33	G. P. and G. S. J.	24	17·28	24	17·75	24	17·51		
,,	27	11	43	11	58	G. S. J. and G. P.	24	16·69	24	17·02	24	16·85		
,,	29	11	18	11	34	G. P. and G. S. J.	24	16·35	24	16·88	24	16·61		
,,	31	11	33	11	51	G. S. J. and G. P.	24	15·14	24	15·36	24	15·25		
APRIL	2	11	35	11	51	G. S. J. and G. P.	24	15·41	24	15·55	24	15·48		
,,	3	11	18	11	40	G. P. and G. S. J.	24	15·42	24	15·81	24	15·61		
,,	5	11	29	11	50	G. S. J. and G. P.	24	15·50	24	15·89	24	15·69		
,,	7	11	10	11	27	G. P. and G. S. J.	24	15·23	24	15·81	24	15·52		
,,	9	11	20	11	36	G. P. and G. S. J.	24	15·76	24	16·02	24	15·89		
,,	10	11	30	11	47	G. S. J. and G. P.	24	15·17	24	15·74	24	15·45		
,,	12	11	0	11	15	G. P. and G. S. J.	24	15·50	24	15·81	24	1 ·65		
,,	14	11	29	11	48	G. S. J. and G. P.	24	15·06	24	15·58	24	15·32	24	16·03
,,	16	11	36	11	53	G. S. J. and G. P.	24	16·02	24	16·82	24	16·42		
,,	17	11	35	11	49	G. P. and G. S. J.	24	16·39	24	16·32	24	16·35		
,,	19	11	26	11	43	G. S. J. and G. P.	24	17·61	24	17·95	24	17·78		
,,	21	11	23	11	39	G. P. and G. S. J.	24	17·28	24	16·84	24	17·06		
,,	23	11	14	11	30	G. P. and G. S. J.	24	17·24	24	17·11	24	17·17		
,,	24	11	37	11	52	G. S. J. and G. P.	24	16·48	24	16·86	24	16·67		
,,	26	11	11	11	28	G. P. and G. S. J.	24	15·24	24	15·28	24	15·26		
,,	28	11	51	12	7	G. S. J. and G. P.	24	15·35	24	15·96	24	15·65		
,,	30	12	6	12	26	A. and G. P.	24	15·33	24	15·81	24	15·57		

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

1915. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	* Monthly mean Inclination. °	′
MAY	1	11	12	11	33	G. P. and A.	24	15·16	24	15·66	24	15·41		
,,	3	11	7	11	26	A. and G. P.	24	15·11	24	15·46	24	15·28		
,,	5	11	30	11	42	G. P. and A.	24	16·09	24	16·39	24	16·24		
,,	7	11	31	11	44	A. and G. P.	24	16·75	24	16·95	24	16·85		
,,	8	11	49	12	5	A. and G. P.	24	17·66	24	17·68	24	17·67		
,,	10	11	31	11	48	A. and G. P.	24	16·63	24	16·72	24	16·67		
,,	12	12	3	12	15	A. and G. P.	24	17·77	24	17·93	24	17·85		
,,	14	11	26	11	42	A. and G. P.	24	17·43	24	17·72	24	17·57		
,,	15	11	40	11	56	A. and G. P.	24	16·79	24	16·60	24	16·69	24	16·83
,,	17	11	5	11	20	A. and G. P.	24	17·80	24	17·87	24	17·83		
,,	19	10	55	11	10	G. P. and A.	24	17·06	24	17·13	24	17·09		
,,	21	10	50	11	3	G. P. and A.	24	18·54	24	18·10	24	18·32		
,,	22	12	19	12	31	A. and G. P.	24	17·23	24	17·35	24	17·29		
,,	24	11	11	11	47	G. P. and A.	24	16·46	24	17·06	24	16·76		
,,	26	11	25	11	39	A. and G. P.	24	16·04	24	15·99	24	16·01		
,,	28	12	22	12	32	A. and G. P.	24	17·30	24	17·22	24	17·26		
,,	29	11	13	11	33	G. P. and A.	24	15·86	24	15·43	24	15·64		
,,	31	12	0	12	17	A. and G. P.	24	16·38	24	16·64	24	16·51		
JUNE	2	11	19	11	33	G. P. and A.	24	16·92	24	16·97	24	16·94		
,,	4	11	16	11	35	G. P. and G. S. J.	24	16·91	24	17·93	24	17·42		
,,	5	11	43	12	9	G. S. J. and G. P.	24	18·14	24	18·70	24	18·42		
,,	7	11	40	12	7	G. P. and G. S. J.	24	16·94	24	16·97	24	16·95		
,,	9	11	58	12	22	G. S. J. and G. P.	24	17·60	24	17·95	24	17·77		
,,	11	11	39	11	57	G. S. J. and G. P.	24	16·94	24	16·53	24	16·73		
,,	12	11	20	11	35	G. P. and G. S. J.	24	16·59	24	16·18	24	16·38		
,,	14	11	26	11	42	G. S. J. and G. P.	24	18·48	24	18·63	24	18·55		
,,	16	11	10	11	23	G. P. and G. S. J.	24	18·33	24	18·30	24	18·31	24	18·38
,,	18	11	10	11	30	G. P. and G. S. J.	24	19·46	24	19·85	24	19·65		
,,	19	12	18	12	35	G. S. J. and G. P.	24	20·52	24	21·14	24	20·83		
,,	21	11	8	11	25	G. P. and G. S. J.	24	20·26	24	20·31	24	20·28		
,,	23	11	25	11	44	G. S. J. and G. P.	24	18·70	24	18·92	24	18·81		
,,	25	11	39	11	57	G. S. J. and G. P.	24	18·42	24	18·66	24	18·54		
,,	26	11	49	12	4	G. P. and G. S. J.	24	19·00	24	18·77	24	18·88		
,,	28	11	39	11	59	G. S. J. and G. P.	24	19·11	24	18·76	24	18·93		
,,	30	11	11	11	26	G. P. and G. S. J.	24	19·07	24	19·16	24	19·11		
JULY	2	11	46	12	0	G. P. and G. S. J.	24	19·92	24	20·01	24	19·96		
,,	3	11	30	11	47	G. S. J. and G. P.	24	19·49	24	19·93	24	19·71		
,,	5	11	10	11	25	G. P. and G. S. J.	24	18·49	24	18·62	24	18·55		
,,	7	11	16	11	33	G. S. J. and G. P.	24	19·95	24	20·40	24	20·17		
,,	9	11	48	12	11	G. S. J. and G. P.	24	18·26	24	17·72	24	17·99		
,,	1	11	11	11	30	G. P. and G. S. J.	24	17·57	24	18·55	24	18·06		
,,	12	12	34	12	54	G. S. J. and G. P.	24	20·08	24	20·57	24	20·32		
,,	14	11	5	11	20	G. P. and G. S. J.	24	18·30	24	18·29	24	18·29		
,,	16	11	12	11	27	G. P. and G. S. J.	24	19·22	24	19·73	24	19·47		
,,	17	11	36	11	53	G. S. J. and G. P.	24	17·79	24	18·72	24	18·25		
,,	19	11	1	11	17	G. P. and G. S. J.	24	18·17	24	18·10	24	18·13	24	19·14
,,	21	12	14	12	35	G. S. J. and G. P.	24	18·79	24	19·24	24	19·01		
,,	23	12	1	12	20	G. S. J. and G. P.	24	18·55	24	18·81	24	18·68		
,,	24	11	14	11	29	G. P. and G. S. J.	24	19·22	24	19·56	24	19·39		
,,	26	11	27	11	41	G. P. and G. S. J.	24	19·07	24	19·24	24	19·15		
,,	28	11	37	11	58	G. S. J. and G. P.	24	18·72	24	19·24	24	18·98		
,,	30	14	4	14	20	G S. J. and G. P.	24	20·67	24	21·59	24	21·13		
,,	31	11	11	11	25	G. P. and G. S. J.	24	19·14	24	19·41	24	19·27		
AUG.	2	11	55	12	12	G. S. J. and G. P.	24	18·77	24	19·42	24	19·09		
,,	4	11	1	11	16	G. P. and G. S. J.	24	19·03	24	19·86	24	19·44		
,,	6	11	12	11	27	G. P. and G. S. J.	24	19·40	24	20·04	24	19·72		
,,	7	11	9	11	30	G. S. J. and G. P.	24	19·06	24	19·73	24	19·39		
,,	9	11	1	11	16	G. P. and G. S. J.	24	19·78	24	19·98	24	19·88		
,,	11	11	41	11	56	G. S. J. and G. P.	24	18·48	24	19·03	24	18·75		
,,	13	11	12	11	3	G. S. J. and G. P.	24	18·99	24	19·64	24	19·31		
,,	14	11	9	11	23	G. P. and G. S. J.	24	19·53	24	20·12	24	19·82		
,,	16	11	26	11	44	G. S. J. and G. P.	24	19·32	24	20·14	24	19·73	24	19·91
,,	18	11	9	11	22	G. P. and G. S. J.	24	19·81	24	20·19	24	20·00		
,,	20	11	16	11	32	G. P. and G. S. J.	24	18·90	24	19·71	24	19·30		
,,	21	11	24	11	39	G. S. J. and G. P.	24	20·49	24	21·01	24	20·75		
,,	23	11	39	11	54	G. P. and G. S. J.	24	20·42	24	21·20	24	20·81		
,,	2	11	22	11	41	G. S. J. and G. P.	24	18·93	24	19·37	24	19·15		
,,	27	11	32	11	46	G. S. J. and G. P.	24	20·83	24	21·53	24	21·18		
,,	28	11	26	11	41	G. P. and G. S. J.	24	21·57	24	21·68	24	21·62		
,,	30	11	30	11	48	G. S. J. and G. P.	24	20·47	24	20·64	24	20·55		

1915.		Alibag Civil Time (0 to 24 hours)				Observers.	Face of Circle.				Mean Inclination.		* Monthly mean Inclination.	
Date.		At commencement.		At conclusion.			East.		West.					
		H.	m.	H.	m.		°	′	°	′	°	′	°	′
Sept.	1	10	57	11	11	G. P. and G. S. J.	24	19·42	24	19·90	24	19·66		
,,	3	11	19	11	31	G. P. and G. S. J.	24	19·44	24	19·82	24	19·63		
,,	4	11	13	11	31	G. S. J. and G. P.	24	19·13	24	19·44	24	19·28		
,,	6	11	23	11	39	G. P. and G. S. J.	24	18·08	24	18·43	24	18·25		
,,	8	11	50	12	7	G. S. J. and G. P.	24	18·85	24	18·88	24	18·86		
,,	10	11	19	11	36	G. S. J. and G. P.	24	19·25	24	19·60	24	19·42		
,,	11	11	14	11	31	G. P. and G. S. J.	24	19·89	24	20·53	24	20·21		
,,	13	12	4	12	26	G. S. J. and G. P.	24	19·16	24	19·89	24	19·52		
,,	15	11	35	11	49	G. P. and G. S. J.	24	19·04	24	19·60	24	19·32	24	19·83
,,	17	11	8	11	25	G. P. and G. S. J.	24	21·14	24	21·15	24	21·14		
,,	18	11	17	11	40	G. S. J. and G. P.	24	19·47	24	19·85	24	19·66		
,,	20	10	59	11	16	G. P. and G. S. J.	24	18·43	24	18·43	24	18·43		
,,	22	11	5	11	21	G. S. J. and G. P.	24	19·05	24	19·51	24	19·28		
,,	24	11	13	11	30	G. S. J. and G. P.	24	20·34	24	21·07	24	20·70		
,,	25	11	2	11	16	G. P. and G. S. J.	24	20·29	24	20·91	24	20·60		
,,	27	11	17	11	38	G. S. J. and G. P.	24	21·52	24	22·16	24	21·84		
,,	29	11	1	11	16	G. P. and G. S. J.	24	21·13	24	21·33	24	21·23		
Oct.	1	11	0	11	16	G. P. and G. S. J.	24	19·79	24	20·07	24	19·93		
,,	2	11	24	11	42	G. S. J. and G. P.	24	20·40	24	21·29	24	20·84		
,,	4	11	2	11	16	G. P. and G. S. J.	24	20·77	24	21·15	24	20·96		
,,	6	11	14	11	35	G. S. J. and G. P.	24	18·75	24	19·23	24	18·99		
,,	8	12	12	12	28	G. S. J. and G. P.	24	21·82	24	21·99	24	21·90		
,,	9	11	5	11	18	G. P. and G. S. J.	24	21·64	24	21·77	24	21·70		
,,	11	11	25	11	45	G. S. J. and G. P.	24	20·30	24	20·13	24	20·21	24	21·47
,,	13	10	50	11	30	G. P. and G. S. J.	24	21·24	24	21·31	24	21·27		
,,	15	10	59	11	14	G. P. and G. S. J.	24	22·77	24	23·06	24	22·91		
,,	16	11	25	11	42	G. S. J. and G. P.	24	22·30	24	22·60	24	22·45		
,,	25	11	28	11	44	G. S. J. and G. P.	24	23·01	24	23·69	24	23·35		
,,	27	11	0	11	19	G. P. and G. S. J.	24	21·43	24	22·19	24	21·81		
,,	29	11	5	11	21	G. P. and G. S. J.	24	22·12	24	22·41	24	22·26		
,,	30	12	21	12	39	G. S. J. and G. P.	24	21·85	24	22·22	24	22·03		
Nov.	1	14	28	14	41	G. P. and G. S. J.	24	24·26	24	24·27	24	24·26		
,,	3	12	14	12	33	G. S. J. and G. P.	24	23·26	24	23·73	24	23·49		
,,	5	11	49	12	5	G. S. J. and G. P.	24	23·05	24	23·65	24	23·35		
,,	10	11	4	11	16	G. P. and G. S. J.	24	22·17	24	22·21	24	22·19		
,,	12	11	0	11	15	G. P. and G. S. J.	24	22·79	24	22·66	24	22·72	24	23·10
,,	13	12	14	12	37	G. S. J. and G. P.	24	22·50	24	23·02	24	22·76		
,,	15	11	21	11	41	G. P. and G. S. J.	24	21·68	24	21·83	24	21·75		
,,	17	11	25	11	46	G. S. J. and G. P.	24	23·50	24	23·74	24	23·62		
,,	19	11	27	11	47	G. S. J. and G. P.	24	23·38	24	24·25	24	23·81		
,,	20	11	36	11	55	G. P. and G. S. J.	24	23·01	24	23·11	24	23·06		
Dec.	6	11	53	12	12	G. S. J. and G. P.	24	22·94	24	23·31	24	23·12		
,,	8	11	13	11	31	G. P. and G. S. J.	24	23·01	24	23·35	24	23·18		
,,	10	11	11	11	22	G. P. and G. S. J.	24	21·91	24	22·15	24	22·03		
,,	11	11	23	11	42	G. S. J. and G. P.	24	22·50	24	23·37	24	22·93		
,,	13	11	5	11	15	G. P. and G. S. J.	24	22·82	24	23·70	24	23·26		
,,	15	11	39	11	58	G. S. J. and G. P.	24	24·85	24	25·46	24	25·15		
,,	17	11	32	11	50	G. S. J. and G. P.	24	23·70	24	23·84	24	23·77	24	23·61
,,	18	11	14	11	31	G. P. and G. S. J.	24	23·99	24	24·65	24	24·32		
,,	20	11	29	11	46	G. S. J. and G. P.	24	24·37	24	24·33	24	24·35		
,,	22	11	6	11	19	G. P. and G. S. J.	24	24·02	24	23·56	24	23·79		
,,	24	11	19	11	37	G. P. and G. S. J.	24	23·52	24	23·56	24	23·54		
,,	27	11	8	11	18	G. P. and G. S. J.	24	23·30	24	23·83	24	23·56		
,,	29	11	39	11	58	G. S. J. and G. P.	24	24·30	24	23·96	24	24·13		
,,	31	11	27	11	45	G. S. J. and G. P.	24	23·20	24	23·50	24	23·35		
						The mean *observed Inclination for the year 1915							°	′
													24	19·03

* The monthly and annual means corrected for diurnal variation appear in Table VIII.

Absolute Magnetical Observations, Alibag.—Table IIIb.

OBSERVATIONS OF INCLINATION, 1915.

Taken with Inductor No. 108 and Galvanometer No. 108A by Otto Toepfer and Sons.

1915. Date.		Alibag Civil Time (0 to 24 hours) At commencement. H. m.	At conclusion. H. m.	Observers.	Face of Circle. East. ° ′	West. ° ′	Mean Inclination. ° ′	* Monthly mean Inclination. ° ′
JANY.	5	11 3	11 19	G. P. and G. S. J.	24 16·29	24 16·28	24 16·28	
„	7	11 15	11 35	G. P. and G. S. J.	24 16·67	24 16·52	24 16·59	
„	9	7 45	8 4	G. S. J. and G. P.	24 18·74	24 18·37	24 18·55	
„	12	11 39	11 57	G. S. J. and G. P.	24 15·32	24 14·89	24 15·10	
„	16	7 48	8 5	G. P. and G. S. J.	24 18·18	24 18·15	24 18·16	
„	19	11 24	11 43	G. P. and G. S. J.	24 16·00	24 15·79	24 15·89	
„	21	11 15	11 30	G. P. and G. S. J.	24 15·81	24 15·73	24 15·77	24 17·07
„	23	7 49	8 8	G. S. J. and G. P.	24 17·46	24 17·87	24 17·66	
„	26	11 49	12 9	G. S. J. and G. P.	24 17·55	24 17·84	24 17·69	
„	28	11 50	12 8	G. S. J. and G. P.	24 17·40	24 18·06	24 17·73	
„	30	7 30	7 48	G. P. and G. S. J.	24 18·44	24 18·32	24 18·38	
FEB.	6	7 45	8 1	G. S. J. and G. P.	24 18·86	24 18·96	24 18·91	
„	9	11 35	11 54	G. S. J. and G. P.	24 17·76	24 17·65	24 17·70	
„	11	8 6	8 22	G. P. and G. S. J.	24 18·98	24 18·68	24 18·83	
„	11	11 51	12 6	G. S. J. and G. P.	24 17·50	24 17·37	24 17·43	
„	16	14 14	14 33	G. P. and G. S. J.	24 17·65	24 17·59	24 17·62	
„	18	11 17	11 35	G. P. and G. S. J.	24 17·20	24 17·14	24 17·17	24 18·14
„	20	7 39	7 57	G. S. J. and G. P.	24 19·68	24 20·22	24 19·95	
„	23	11 44	12 4	G. S. J. and G. P.	24 17·46	24 17·47	24 17·46	
„	25	11 51	12 7	G. S. J. and G. P.	24 17·30	24 17·20	24 17·25	
„	27	7 42	8 4	G. P. and G. S. J.	24 19·15	24 19·04	24 19·09	
MARCH	2	11 28	11 44	G. P. and G. S. J.	24 17·19	24 17·37	24 17·28	
„	4	11 26	11 46	G. P. and G. S. J.	24 16·92	24 16·79	24 16·85	
„	6	7 45	8 5	G. S. J. and G. P.	24 18·98	24 19·23	24 19·10	
„	9	11 27	11 44	G. S. J. and G. P.	24 18·74	24 18·76	24 18·75	
„	11	11 35	11 53	G. S. J. and G. P.	24 16·73	24 16·87	24 16·80	
„	13	7 32	7 50	G. P. and G. S. J.	24 18·04	24 17·97	24 18·00	24 17·99
„	16	11 49	12 5	G. P. and G. S. J.	24 17·13	24 17·12	24 17·12	
„	18	11 24	11 42	G. P. and G. S. J.	24 17·08	24 17·35	24 17·21	
„	20	7 25	7 44	G. S. J. and G. P.	24 19·80	24 19·99	24 19·89	
„	23	11 48	12 3	G. S. J. and G. P.	24 18·25	24 18·19	24 18·22	
„	27	7 12	7 29	G. P. and G. S. J.	24 19·34	24 19·48	24 19·41	
„	30	11 21	11 37	G. P. and G. S. J.	24 17·18	24 17·24	24 17·21	
APRIL	1	11 8	11 25	G. P. and G. S. J.	24 17·51	24 17·54	24 17·52	
„	3	7 8	7 30	G. S. J. and G. P.	24 20·18	24 20·66	24 20·42	
„	6	11 43	12 3	G. S. J. and G. P.	24 16·60	24 16·39	24 16·49	
„	8	11 47	12 0	G. S. J. and G. P.	24 16·57	24 16·37	24 16·47	
„	10	6 58	7 18	G. P. and G. S. J.	24 20·26	24 20·43	24 20·34	
„	13	11 17	11 34	G. P. and G. S. J.	24 15·56	24 15·52	24 15·54	
„	15	11 16	11 35	G. P. and G. S. J.	24 14·88	24 14·99	24 14·93	24 18·03
„	17	7 5	7 21	G. S. J. and G. P.	24 21·09	24 21·41	24 21·25	
„	20	11 28	11 45	G. S. J. and G. P.	24 17·75	24 18·21	24 17·98	
„	22	11 38	11 52	G. S. J. and G. P.	24 17·42	24 16·95	24 17·18	
„	24	6 51	7 8	G. P. and G. S. J.	24 21·26	24 21·43	24 21·34	
„	27	11 18	11 34	G. P. and G. S. J.	24 17·80	24 17·75	24 17·77	
„	29	11 10	11 28	G. P. and G. S. J.	24 17·33	24 17·08	24 17·20	
MAY	1	7 19	7 49	A. and G. P.	24 19·72	24 19·71	24 19·71	
„	4	11 20	11 43	A. and G. P.	24 17·04	24 17·29	24 17·16	
„	6	11 45	12 2	A. and G. P.	24 17·44	24 17·30	24 17·37	
„	8	6 56	7 11	A. and G. P.	24 20·16	24 20·24	24 20·20	
„	11	11 32	11 45	G. P. and A.	24 18·69	24 18·58	24 18·63	
„	13	11 45	11 57	G. P. and A.	24 18·24	24 18·11	24 18·17	
„	15	7 0	7 16	G. P. and A.	24 20·82	24 20·42	24 20·62	
„	18	10 13	10 24	A. and G. P.	24 19·23	24 18·98	24 19·10	24 19·19
„	20	11 45	11 59	A. and G. P.	24 19·15	24 18·95	24 19·05	
„	22	6 45	7 5	G. P. and A.	24 21·10	24 21·21	24 21·15	
„	25	11 11	11 26	G. P. and A.	24 18·15	24 18·08	24 18·11	
„	27	11 22	11 41	G. P. and A.	24 18·31	24 18·53	24 18·42	
„	29	6 50	7 4	A. and G. P.	24 21·74	24 21·80	24 21·77	

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

1915. Date.		Alibag Civil Time (0 to 24 hours). At commencement. H.	m.	At conclusion. H.	m.	Observers.	Face of Circle. East. °	′	West. °	′	Mean Inclination. °	′	* Monthly mean Inclination. °	′
JUNE	1	11	15	11	29	A. and G. P.	24	17·35	24	17·30	24	17·32		
,,	3	11	25	11	42	G. S. J. and G. P.	24	18·76	24	19·40	24	19·08		
,,	5	6	41	6	57	G. P. and G. S. J.	24	22·05	24	22·01	24	22·03		
,,	8	11	8	11	26	G. P. and G. S. J.	24	18·78	24	18·73	24	18·75		
,,	10	11	20	11	36	G. P. and G. S. J.	24	19·11	24	19·11	24	19·11		
,,	12	7	2	7	18	G. S. J. and G. P.	24	22·86	24	22·98	24	22·92		
,,	15	11	33	11	54	G. S. J. and G. P.	24	18·16	24	18·63	24	18·39	24	20·55
,,	17	11	45	12	5	G. S. J. and G. P.	24	21·39	24	20·65	24	21·02		
,,	19	7	5	7	24	G. P. and G. S. J.	24	24·25	24	24·49	24	24·37		
,,	22	11	10	11	27	G. P. and G. S. J.	24	21·74	24	22·32	24	22·03		
,,	24	11	21	11	38	G. P. and G. S. J.	24	19·55	24	19·36	24	19·45		
,,	26	7	28	7	48	G. S. J. and G. P.	24	22·83	24	22·84	24	22·83		
,,	29	11	29	11	48	G. S. J. and G. P.	24	20·24	24	19·44	24	19·84		
JULY	1	11	41	12	3	G. S. J. and G. P.	24	21·55	24	21·65	24	21·60		
,,	3	7	4	7	21	G. P. and G. S. J.	24	24·04	24	24·22	24	24·13		
,,	6	11	40	11	55	G. P. and G. S. J.	24	20·98	24	21·35	24	21·16		
,,	8	11	5	11	21	G. P. and G. S. J.	24	21·14	24	21·70	24	21·42		
,,	10	7	16	7	46	G. S. J. and G. P.	24	23·07	24	23·10	24	23·08		
,,	13	11	26	11	44	G. S. J. and G. P.	24	20·16	24	19·66	24	19·91	24	21·78
,,	15	11	30	11	48	G. S. J. and G. P.	24	19·15	24	18·70	24	18·92		
,,	17	7	5	7	19	G. P. and G. S. J.	24	23·79	24	24·26	24	24·02		
,,	20	11	31	12	0	G. S. J.	24	18·94	24	19·18	24	19·06		
,,	22	11	25	11	51	G. S. J.	24	21·88	24	21·58	24	21·73		
,,	24	7	26	7	52	G. S. J. and G. P.	24	22·80	24	22·06	24	22·43		
,,	27	11	19	11	32	G. P. and G. S. J.	24	21·60	24	21·25	24	21·42		
,,	29	11	7	11	28	G. P. and G. S. J.	24	22·42	24	22·11	24	22·26		
,,	31	7	15	7	36	G. S. J. and G. P.	24	23·86	24	23·84	24	23·85		
AUG.	3	11	20	11	57	G. S. J. and G. P.	24	19·50	24	19·78	24	19·64		
,,	5	12	53	13	16	G. S. J. and G. P.	24	21·34	24	21·43	24	21·38		
,,	7	6	57	7	18	G. P. and G. S. J.	24	24·36	24	24·94	24	24·65		
,,	10	11	10	11	29	G. P. and G. S. J.	24	19·60	24	19·49	24	19·54		
,,	12	11	2	11	17	G. P. and G. S. J.	24	19·53	24	19·59	24	19·56		
,,	14	7	18	7	40	G. S. J. and G. P.	24	23·19	24	23·53	24	23·36		
,,	17	11	7	11	23	G. S. J. and G. P.	24	19·54	24	19·48	24	19·51	24	21·59
,,	19	11	7	11	23	G. S. J. and G. P.	24	20·18	24	20·19	24	20·18		
,,	21	7	4	7	21	G. P. and G. S. J.	24	22·93	24	23·00	24	22·96		
,,	26	11	2	11	19	G. P. and G. S. J.	24	22·43	24	22·63	24	22·53		
,,	28	7	10	7	30	G. S. J. and G. P.	24	24·94	24	25·71	24	25·32		
,,	31	11	18	11	35	G. S. J. and G. P.	24	20·76	24	20·22	24	20·49		
SEPT.	4	7	14	7	37	G. P. and G. S. J.	24	24·45	24	24·18	24	24·31		
,,	7	11	7	11	23	G. P. and G. S. J.	24	19·80	24	19·70	24	19·75		
,,	9	11	7	11	24	G. P. and G. S. J.	24	20·26	24	21·11	24	20·68		
,,	11	7	23	7	45	G. S. J. and G. P.	24	23·50	24	23·68	24	23·59		
,,	14	12	19	12	35	G. S. J. and G. P.	24	21·00	24	20·71	24	20·85		
,,	16	11	14	11	31	G. S. J. and G. P.	24	21·11	24	20·78	24	20·94		
,,	18	7	23	7	39	G. P. and G. S. J.	24	24·31	24	24·22	24	24·26	24	22·12
,,	21	11	5	11	22	G. P. and G. S. J.	24	20·37	24	20·33	24	20·35		
,,	23	11	6	11	27	G. P. and G. S. J.	24	22·29	24	22·01	24	22·15		
,,	25	7	15	7	32	G. S. J. and G. P.	24	25·43	24	25·08	24	25·25		
,,	28	11	8	11	24	G. S. J. and G. P.	24	21·82	24	21·49	24	21·65		
,,	30	11	27	11	45	G. S. J. and G. P.	24	21·19	24	22·16	24	21·67		
OCT.	2	7	1	7	19	G. P. and G. S. J.	24	26·09	24	26·08	24	26·08		
,,	5	11	26	11	42	G. P. and G. S. J.	24	21·17	24	20·96	24	21·06		
,,	7	11	3	11	21	G. P. and G. S. J.	24	20·62	24	20·46	24	20·54		
,,	9	7	29	7	47	G. S. J. and G. P.	24	25·84	24	25·37	24	25·60		
,,	12	11	21	11	37	G. S. J. and G. P.	24	22·01	24	21·57	24	21·79		
,,	14	11	25	11	42	G. P. M.	24	22·77	24	22·41	24	22·59		
,,	16	7	37	7	51	G. P. and G. S. J.	24	26·82	24	26·38	24	26·60		
,,	18	11	17	11	30	G. P. and G. S. J.	24	22·30	24	22·14	24	22·22	24	23·83
,,	19	11	6	11	20	G. P. and G. S. J.	24	21·98	24	21·95	24	21·96		
,,	20	11	25	11	42	G. S. J. and G. P.	24	23·81	24	23·81	24	23·81		
,,	21	11	1	11	16	G. P. and G. S. J.	24	24·15	24	24·20	24	24·17		
,,	22	11	32	11	57	G. S. J. and G. P.	24	24·28	24	23·97	24	24·12		
,,	23	16	30	16	46	G. P. and G. S. J.	24	27·03	24	27·45	24	27·24		
,,	26	11	29	11	54	G. S. J. and G. P.	24	23·82	24	24·21	24	24·01		
,,	28	11	27	11	46	G. S. J. and G. P.	24	23·22	24	23·32	24	23·27		
,,	30	7	56	8	15	G. P. and G. S. J.	24	26·06	24	26·38	24	26·22		

1915. Date.	Alibag Civil Time (0 to 24 hours) At commencement.		At conclusion.		Observers.	Face of Circle. East.		West.		Mean Inclination.		* Monthly mean Inclination.
	H.	m.	H.	m.		°	′	°	′	°	′	° ′
Nov. 2	11	3	11	19	G. P. and G. S. J.	24	24·04	24	24·12	24	24·08	
„ 4	7	25	7	43	G. S. J. and G. P.	24	25·87	24	25·72	24	25·79	
„ 4	11	2	11	15	G. P. and G. S. J.	24	24·01	24	23·81	24	23·91	
„ 9	11	38	11	58	G. S. J. and G. P.	24	26·08	24	25·30	24	25·69	
„ 11	11	25	11	43	G. S. J. and G. P.	24	24·84	24	24·78	24	24·81	
„ 13	7	13	7	32	G. P. and G. S. J.	24	26·17	24	25·79	24	25·98	
„ 16	11	5	11	25	G. P. and G. S. J.	24	25·73	24	25·73	24	25·73	
„ 18	11	21	11	34	G. P. and G. S. J.	24	25·49	24	25·13	24	25·31	
„ 20	7	41	7	59	G. S. J. and G. P.	24	27·15	24	26·86	24	27·00	24 25·02
„ 22	11	56	12	17	G. S. J. and G. P.	24	25·03	24	25·09	24	25·06	
„ 23	11	29	11	47	G. S. J. and G. P.	24	25·04	24	25·19	24	25·11	
„ 24	11	1	11	16	G. P. and G. S. J.	24	24·25	24	24·17	24	24·21	
„ 25	11	57	12	22	G. S. J. and G. P.	24	25·32	24	25·34	24	25·33	
„ 26	11	9	11	26	G. P. and G. S. J.	24	24·08	24	24·07	24	24·07	
„ 27	11	39	12	3	G. S. J. and G. P.	24	24·08	24	23·78	24	23·93	
„ 29	10	45	11	1	G. P. and G. S. J.	24	24·42	24	24·25	24	24·33	
„ 30	10	55	11	8	G. P. and G. S. J.	24	25·08	24	24·93	24	25·00	
Dec. 1	11	16	11	35	G. S. J. and G. P.	24	24·02	24	24·15	24	24·08	
„ 2	11	10	11	25	G. P. and G. S. J.	24	23·82	24	23·66	24	23·74	
„ 3	11	27	11	51	G. S. J. and G. P.	24	24·56	24	24·48	24	24·52	
„ 4	11	16	11	29	G. P. and G. S. J.	24	24·55	24	24·56	24	24·55	
„ 7	11	55	12	19	G. S. J. and G. P.	24	25·12	24	25·99	24	25·55	
„ 9	11	50	12	8	G. S. J. and G. P.	24	24·42	24	24·70	24	24·56	
„ 11	7	28	7	54	G. P. and G. S. J.	24	26·52	24	26·76	24	26·64	
„ 14	14	43	14	57	G. P. and G. S. J.	24	24·68	24	24·44	24	24·56	24 25·01
„ 16	11	4	11	18	G. P. and G. S. J.	24	26·03	24	25·81	24	25·92	
„ 18	7	40	7	58	G. S. J. and G. P.	24	25·85	24	25·93	24	25·89	
„ 21	11	22	11	42	G. S. J. and G. P.	24	24·20	24	23·90	24	24·05	
„ 23	7	28	7	42	G. P. and G. S. J.	24	26·52	24	26·43	24	26·47	
„ 23	11	27	11	47	G. S. J. and G. P.	24	24·22	24	24·17	24	24·19	
„ 28	11	13	11	25	G. P. and G. S. J.	24	24·49	24	24·93	24	24·71	
„ 30	7	21	7	41	G. S. J. and G. P.	24	25·87	24	25·95	24	25·91	
„ 30	11	51	12	4	G. P. and G. S. J.	24	24·50	24	25·02	24	24·76	

The mean* observed Inclination for the year 1915 = 24° 20′·86

* The monthly and annual means corrected for diurnal variation appear in Table VIII*a*.

TABLE IV*a*.—*Base line values of the Horizontal Force Magnetograph derived*

36000γ+ **1911**

1911.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed,	Calculated.	Observed less calculated.	Observed	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 ..		472		470	474	−4	480	482	−2		491		(500)	502	(−2)	(528)	516	(+12)
2 ..	(471)	473	(−2)		474			483			491			502		520	516	+4
3 ..		473			474			483		(494)	492	(+2)	503	503	0		516	
4 ..	474	473	+1		474			483			492			503			517	
5 ..		474			474			483		491	492	−1		503		524	518	+6
6 ..		474		(471)	474	(−3)	(487)	484	(+3)		493			503		(521)	518	(+3)
7 ..		474			474			484			494			503		517	518	−1
8 ..		474		471	474	−3	491	484	+7		494		(507)	503	(+4)	(518)	519	(−1)
9 ..	(470)	474	(−4)		474			484			494			503		513	519	−6
10 ..		474			474			485		(496)	494	(+2)	506	504	+2	(534)	519	(+15)
11 ..	472	474	−2		474			485			495			504			519	
12 ..		473			475			485		496	495	+1		505		517	520	−3
13 ..		473		(477)	475	(+2)	(489)	485	(+4)		496			505		(517)	519	(−2)
14 ..		473			475			486			496			506			519	
15 ..		473		477	476	+1		486			496		(509)	506	(+3)	(513)	519	(−6)
16 ..	(476)	473	(+3)		476		490	487	+3		497			507		514	518	−4
17 ..		473			477			487		(495)	497	(−2)	506	508	−2	(519)	518	(+1)
18 ..	481	473	+8		477			488			497			509			518	
19 ..		473			478			488		502	498	+4		510		512	518	−6
20 ..		473		(475)	478	(−3)	(480)	488	(−8)		498			510		(506)	518	(−12)
21 ..		473			479			489			498			511		525	519	+6
22 ..		473		485	479	+6		489			499		501	511	−10		519	
23 ..	(476)	473	(+3)		480		487	489	−2		499		(496)	512	(−16)	514	519	−5
24 ..		473			480			489		(498)	500	(−2)	509	512	−3	(528)	518	(+10)
25 ..	471	473	−2		481			490			500		(512)	513	(−1)		519	
26 ..		473			482			490		497	501	−4	505	513	−8	525	519	+6
27 ..		474		(473)	482	(−9)	(484)	490	(−6)		501		(516)	513	(+3)	(515)	519	(−4)
28 ..		474			482			490			501			514		518	519	−1
29 ..		474						490			502		513	515	−2	(518)	520	(−2)
30 ..	(471)	474	(−3)				493	490	+3		502		(518)	515	(+3)	524	521	+3
31 ..		474						491					526	515	+11			
Means ..	474	473	±3	476	477	±3	488	487	±3	496	496	±2	509	508	±5	519	518	±4
	(473)		(±3)	(474)		(±4)	(485)		(±5)	(496)		(±2)	(508)		(±5)	(520)		(±6)

Values in brackets are derived from observations with Instrument No. 3. They are reduced to those derived from Instrument No. 7, by applying a correction of + 2γ from 1st January 1911 to 18th June 1912, a correction of −6 γ from 18th June 1912 to 17th May 1915, and a correction of −9 γ from 17th May to 31st December 1915, which are on an average the differences found to exist between the values of H. determined from the two instruments.

Base line values are derived by converting the corresponding mean ordinates in Tables I*a* and I*b* in C. G. S. unit (Unity = 1 γ) and substracting the converted ordinates from the mean observed absolute Horizontal Force. From the corresponding temperatures in Tables I*a* and I*b* and by means of the adopted temperature co-efficient 3·6γ for 1° F. they are further reduced to an uniform temperature of 85° F. to make the series comparable from month to month and year to year.

from Observations of Horizontal Force with Instrument No. 7 and Instrument No. 3.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
(521)	521	(0)	(537)	530	(+7)	547	536	+11		542		557	552	+5	555	558	−3
	521		528	530	−2	(526)	536	(−10)		542		(551)	551	(0)	(555)	558	(−3)
518	522	−4	(529)	530	(−1)		536		(543)	542	(+1)	555	551	+4		559	
(523)	522	(+1)	538	530	+8	540	537	+3	547	542	+5	(556)	551	(+5)	561	559	+2
521	522	−1	(534)	530	(+4)	(534)	537	(−3)	(545)	543	(+2)		551		(562)	559	(+3)
(516)	522	(−6)		530		532	537	−5	540	544	−4	553	551	+2	557	559	−2
523	522	+1	520	531	−11	(533)	537	(−4)	(544)	545	(−1)	(552)	551	(+1)		560	
(520)	522	(−2)	(529)	531	(−2)	533	537	−4		545		549	552	−3	570	560	+10
	522			531		(538)	537	(+1)	545	545	0	(555)	552	(+3)	(552)	560	(−8)
521	523	−2	(534)	532	(+2)		537		(552)	546	(+6)	549	552	−3		560	
(536)	523	(+13)	525	532	−7	536	537	−1	545	546	−1	(561)	553	(+8)	561	561	0
534	523	+11	(530)	532	(−2)		538		(547)	546	(+1)		553			561	
(520)	523	(−3)		532			538		541	547	−6	543	552	−9	559	561	−2
517	523	−6	542	532	+10	(554)	538	(+16)	(546)	548	(−2)	(545)	553	(−8)	(566)	562	(+4)
(524)	524	(0)	(530)	532	(−2)	524	538	−14		548		549	553	−4	567	562	+5
	524		522	532	−10	(546)	538	(+8)	544	548	−4	(553)	553	(0)	(562)	563	(−1)
511	524	−13		533			538		(552)	548	(+4)	543	553	−10		563	
(543)	525	(+18)	529	533	−4		538		558	549	+9	(556)	553	(+3)	563	563	0
513	526	−13	(540)	533	(+7)	(540)	538	(+2)	(557)	549	(+8)		553		(564)	563	(+1)
(524)	526	(−2)		533		554	539	+15	543	549	−6	564	554	+10	563	563	0
525	527	−2	527	533	−6	(532)	539	(−7)		550		(555)	554	(+1)	(559)	564	(−5)
(534)	527	(+7)	(536)	534	(+2)	540	540	0		550		558	554	+4	565	564	+1
	527		536	534	+2	(538)	540	(−2)		550		(559)	554	(+5)	(569)	564	(+5)
518	527	−9	(551)	534	(+17)		540			551		535	555	−20		565	
(526)	527	(−1)	529	534	−5	533	541	−8	556	551	+5	(569)	555	(+14)		565	
523	527	−4	(528)	534	(−6)	(545)	541	(+4)	(549)	551	(−2)		556		(562)	566	(−4)
	528			534		537	541	−4	554	551	+3	568	556	+12	562	566	−4
525	528	−3		534		(547)	541	(+6)	(552)	552	(0)	(551)	557	(−6)	(569)	566	(+3)
(532)	529	(+3)		535		537	542	−5		552		555	557	−2	565	566	−1
	528		532	536	−4	(530)	542	(−12)	547	552	−5	(550)	558	(−8)	(564)	566	(−2)
537	529	+8	(537)	536	(+1)				(547)	552	(−5)					566	
522	525	±6	530	532	±6	538	538	±6	547	548	±4	552	553	±7	562	562	±2
(527)		(±5)	(535)		(±4)	(539)		(±6)	(549)		(±3)	(555)		(±5)	(562)		(±4)

Observed base line values for each day represent the result of a double set of vibration and deflection observations, except during the period 22nd May 1911 to 15th May 1912, when for investigational purposes a single set was taken daily, Sundays and holidays excluded.

The calculated values in column 2 are derived by taking overlapping means of 10 successive double sets of observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation. During the period 22nd May 1911 to 15th May 1912 referred to above 20 single sets of observations were used to derive the calculated values.

The departures of the observed from the calculated values in column 3 represent in the main the probable errors of the absolute determinations, and any irregularities in the adopted values of the instrumental and the site differences.

TABLE IVb.—*Base line values of the Horizontal Force Magnetograph derived*

36000γ +. **1912.**

1912.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 ..		566		(568)	567	(+1)	573	573	0	577	583	−6	595	591	+4		598	
2 ..		567		562	568	−6		573		(581)	583	(−2)	(597)	591	(+6)		599	
3 ..	563	567	−4	(555)	568	(−13)		574		582	583	−1	589	591	−2	(602)	599	(+3)
4 ..	(566)	567	(−1)		568		568	574	−6	(587)	584	(+3)	(589)	592	(−3)		599	
5 ..	577	567	+10	568	569	−1	(569)	574	(−5)		584			592		599	599	0
6 ..	(568)	567	(+1)	(567)	569	(−2)	576	574	+2		584		590	592	−2		599	
7 ..		567		568	569	−1	(567)	574	(−7)		584		(591)	592	(−1)		599	
8 ..	570	567	+3	(569)	569	(0)	571	574	−3	581	584	−3		592			600	
9 ..	(576)	568	(+8)	568	570	−2	(571)	575	(−4)	(581)	585	(−4)	(594)	593	(+1)		600	
10 ..		568		(569)	570	(−1)		575		585	585	0	595	593	+2	(602)	601	(+1)
11 ..	(558)	567	(−9)		570		576	575	+1	(580)	585	(−5)	(595)	593	(+2)		601	
12 ..	572	567	+5	575	570	+5	(576)	575	(+1)	581	585	−4		593		597	601	−4
13 ..	(569)	567	(+2)	(580)	571	(+9)	580	576	+4	(601)	586	(+15)	(602)	594	(+8)		601	
14 ..		567		574	571	+3	(574)	576	(−2)		586		580	594	−14		601	
15 ..	571	568	+3	(575)	572	(+3)		577		(589)	586	(+3)	594	595	−1		601	
16 ..	(567)	568	(−1)		573		(585)	577	(+8)	582	587	−5		595			601	
17 ..	563	568	−5	(571)	573	(−2)		578		(586)	587	(−1)		595		(601)	601	(0)
18 ..	(562)	567	(−5)		573		(577)	578	(−1)	591	587	+4		595			601	
19 ..	571	567	+4	578	573	+5	578	578	0	585	588	−3		595		603	601	+2
20 ..	(572)	567	(+5)	(569)	573	(−4)	(573)	579	(−6)	(589)	588	(+1)	(598)	596	(+2)		601	
21 ..		567		572	573	−1	580	579	+1		589			596			601	
22 ..	568	566	+2	(577)	573	(+4)	582	580	+2	589	589	0	591	596	−5		602	
23 ..	(563)	566	(−3)	575	573	+2	(583)	580	(+3)	(593)	589	(+4)		597			602	
24 ..	560	566	−6	(565)	573	(−8)		581		587	590	−3		597		(599)	602	(−3)
25 ..	(561)	566	(−5)		573		587	581	+6	(590)	590	(0)		597			602	
26 ..	576	566	+10	583	573	+10	(583)	581	(+2)	581	589	−8		597		606	603	+3
27 ..	(566)	566	(0)	(582)	573	(+9)		581		(599)	590	(+9)	(599)	597	(+2)		603	
28 ..		566		573	573	0	(581)	581	(0)		590			598			603	
29 ..		566		(563)	573	(−10)	586	581	+5	587	591	−4	600	598	+2		603	
30 ..	(565)	567	(−2)				(581)	582	(−1)	(589)	591	(−2)		598			603	
31 ..	571	567	+4					582						598				
Means. ..	569	567	±5	572	571	±3	578	577	±3	584	587	±3	592	595	±4	601	601	±2
	(566)		(±3)	(570)		(±5)	(577)		(±3)	(589)		(±4)	(596)		(±3)	(601)		(±2)

from Observations of Horizontal Force with Instrument No. 7 and Instrument No. 3.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
(597)	603	(−6)		606			614		626	623	+3		628			634	
	604			607		(614)	614	(0)		623			628			634	
609	604	+5		607			615			623			628		(631)	634	(−3)
	604			607			615			623		(630)	628	(+2)	637	634	+3
	604		(610)	607	(+3)	617	615	+2		624			628			635	
	604			608			615			624		629	628	+1		635	
	604		608	608	0		616		(624)	625	(−1)		628			635	
	604			609			616			625			629			635	
(601)	603	(−2)		609		(619)	616	(+3)	622	625	−3		629		(633)	635	(−2)
609	604	+5		609			616			625			629			636	
	604			610		611	616	−5		625		(626)	629	(−3)	635	636	−1
	604		(609)	610	(−1)		617			625			629			636	
	604			610			617			625		629	629	0		637	
	603		608	610	−2		617		(632)	626	(+6)		630			637	
(607)	604	(+3)		611			617			626			630			637	
	604			611		(613)	618	(−5)	627	627	0		630		(644)	637	(+7)
603	605	−2		611			618			627			630			637	
	605			612		615	618	−3		627		(627)	630	(−3)	637	637	0
	605		(615)	612	(+3)		619			627			631			638	
	605			612			619			627		633	631	+2		638	
	605		613	613	0		619			627			631			638	
(602)	605	(−3)		613			619			627			631			638	
	605			613		(624)	620	(+4)	628	627	+1		631		(638)	639	(−1)
601	605	−4		613			620			627			631		637	639	−2
	606			613		619	620	−1		627		(630)	631	(−1)		639	
	606		(616)	613	(+3)		621			627			631			639	
	606			613			621			627		634	632	+2		639	
	606		613	614	−1		621		(625)	627	(−2)		633			639	
(601)	606	(−5)		614			622			628			633			639	
	606			614		(623)	622	(+1)	629	628	+1		633		(642)	640	(+2)
607	606	+1		614						628						640	
606	605	±3	610	611	±1	615	618	±3	626	626	±2	631	630	±1	636	637	±1
(602)		(±4)	(612)		(±2)	(619)		(±3)	(627)		(±3)	(628)		(±2)	(638)		(±3)

TABLE IVc.—*Base line values of the Horizontal Force Magnetograph derived*

36000γ+ **1913.**

1913.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 ..		640			644			647			655			663			673	
2 ..	637	640	−3		645			647		658	656	+2		664		(675)	673	(+2)
3 ..		640		(646)	645	(+1)	(643)	647	(−4)		656			664			673	
4 ..		640			645			647			657			664		681	673	+8
5 ..		640		642	645	−3	647	648	−1		657		(658)	664	(−6)		674	
6 ..	(643)	640	(+3)		645			648			657			664			674	
7 ..		641			645			648		(661)	657	(+4)	667	664	+3		674	
8 ..	641	641	0		645			648			658			664			674	
9 ..		641			645			648		655	658	−3		665		(683)	675	(+8)
10 ..		641		(645)	645	(0)	(647)	648	(−1)		658			665			675	
11 ..		641			645			649			658			665		676	675	+1
12 ..		641		646	645	+1	650	649	+1		659		(665)	666	(−1)		675	
13 ..		642			645			649			659			666			675	
14 ..		642			645			650		(652)	659	(−7)	668	666	+2		675	
15 ..	642	642	0		645			650			659			667			675	
16 ..		643			645			650			659			667		(669)	675	(−6)
17 ..		642		(646)	645	(+1)	(647)	651	(−4)	661	659	+2		668			675	
18 ..		642			645			651			659			668		671	675	−4
19 ..		642		651	645	+6	654	652	+2		659		(671)	669	(+2)		676	
20 ..	(642)	642	(0)		646			652			660			669			676	
21 ..		642			646			653		(666)	660	(+6)	661	670	−9		675	
22 ..	645	643	+2		646			653			660			671			675	
23 ..		643			646			653		659	660	−1		672		(675)	675	(0)
24 ..		643		(645)	646	(−1)	(654)	653	(+1)		660			672			674	
25 ..		643			646			654			661			672		678	674	+4
26 ..		643		644	646	−2	655	654	+1		661		(674)	672	(+2)		674	
27 ..	(643)	643	(0)		646			654			661			673			674	
28 ..		643			647			654		(663)	662	(+1)	672	673	−1		674	
29 ..	646	644	+2					654			662			673			674	
30 ..		644						655		660	662	−2		673		(675)	674	(+1)
31 ..		644					(655)	655	(0)					673				
Means ..	642	642	±1	646	645	±3	651	651	±1	659	659	±2	667	668	±4	676	674	±4
	(643)		(±1)	(645)		(±1)	(649)		(±2)	(660)		(±4)	(667)		(±3)	(675)		(±3)

from Observations of Horizontal Force with Instrument No. 7 and Instrument No. 3.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
	674			675			683		483	486	−3		489		(483)	487	(−4)
672	674	−2		675		(685)	683	(+2)		486			489			487	
	674			675		683	683	0		487		(483)	489	(−6)	497	487	+10
	674		(675)	675	(0)		683			487			489			487	
	674			675			684			487		491	488	+3		487	
	674		672	675	−3		684		(489)	488	(+1)		488			487	
(676)	674	(+2)		675			684			488			488			487	
	674			675		(688)	684	(+4)	489	488	+1		488		(483)	487	(−4)
668	674	−6		676			685			489			488			487	
	674			676		683	685	−2		490		(481)	488	(−7)	491	488	+3
	674		(675)	676	(−1)		685			490			487			488	
	674			676			685			490		493	487	+6		489	
	674		677	677	0		686		(490)	491	(−1)		487			489	
(678)	674	(+4)		677			686			491			487			489	
	674			677		(482)	*482	(0)	491	490	+1		487		(484)	489	(−5)
675	674	+1		678			482			490			487			490	
	674			678		480	482	−2		489		(483)	487	(−4)	487	490	−3
	674		(683)	678	(+5)		483			489			487			490	
	674			679			483			490		490	487	+3		491	
	674		677	679	−2		483		(492)	490	(+2)		487			491	
(674)	674	(0)		679			483			490			487			491	
	674			680		(472)	484	† (−12)	491	490	+1		487		(489)	491	(−2)
673	674	−1		680			484			489			487			491	
	673			680		479	484	−5		489		(481)	487	(−6)	490	491	−1
	673		(676)	681	(−5)		484			489			487			491	
	674			681			485			489		489	487	+2		492	
	674		685	681	+4		485		(491)	489	(+2)		487			492	
(674)	674	(0)		682			485			490			487			492	
	674			682		(503)	485	† (+18)	493	488	+5		487		(497)	492	(+5)
671	675	−4		682			486			489			487			492	
	675			682						489					495	493	+2
672	674	±3	678	678	±2			±2	489	489	±2	491	487	±3	492	490	±4
(675)		(±1)	(677)		(±3)			(±7)	(490)		(±1)	(482)		(±6)	(487)		(±4)

*Adjustment of the Horizontal Force Magnetograph on the 15th September.

† Errors due to change of observers.

TABLE IVd.—*Base line values of the Horizontal Force Magnetograph derived*

36000γ+ **1914.**

1914.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 ..		493			497			500		503	506	−3		513		(523)	523	(0)
2 ..		494		(500)	497	(+3)	(496)	500	(−4)		506			514			523	
3 ..		494			497			501			507			514		522	523	−1
4 ..		494		499	497	+2	502	501	+1		507		(520)	514	(+6)		523	
5 ..	(496)	495	(+1)		497			501			507			514			523	
6 ..		495			497			501			507		516	515	+1		523	
7 ..	494	495	−1		497			501		(509)	507	(+2)		516			523	
8 ..		495			497			502		510	507	+3		516		(524)	523	(+1)
9 ..		495		(491)	497	(−6)	(509)	502	(+7)		507			517			523	
10 ..		495			497			502			508			517		522	523	−1
11 ..		496		501	497	+4		502			508		(516)	517	(−1)		523	
12 ..	(494)	496	(−2)		497		504	503	+1		508			518			523	
13 ..		497			498			503		(511)	508	(+3)	516	518	−2		523	
14 ..		497			498			503			509			519			523	
15 ..	499	497	+2		498			504		507	509	−2		519		(525)	523	(+2)
16 ..		497			498		(506)	504	(+2)		510			519			523	
17 ..		497		(492)	498	(−6)		504			510			519		527	523	+4
18 ..		497		497	499	−2	503	504	−1		510		(517)	520	(−3)		523	
19 ..	(499)	497	(+2)		499			504			511			520			523	
20 ..		497			499			505		(509)	511	(−2)	517	520	−3		523	
21 ..	496	497	−1		499			505			512			520			524	
22 ..		497			498			505		508	512	−4		520		(523)	524	(−1)
23 ..		497			499		(504)	506	(−2)		512			520			524	
24 ..		497			499			506			512			520		516	524	−8
25 ..		497		500	499	+1	504	506	−2		512		(526)	521	(+5)		524	
26 ..	(493)	497	(−4)		500			506			513			521			524	
27 ..		498			500			506		(509)	513	(−4)	525	521	+4		524	
28 ..	505	498	+7		500			506			513			521			524	
29 ..		498						506		517	513	+4		522		(524)	524	(0)
30 ..		497					(507)	506	(+1)		513			522			524	
31 ..		497						506						522				
Means ..	498	496	±3	499	498	±2	503	504	±1	509	510	±3	518	518	±2	522	523	±3
	(495)		(±2)	(494)		(±5)	(504)		±3	(509)		(±3)	(520)		(±4)	(524)		(±1)

from Observations of Horizontal Force with Instrument No. 7 and Instrument No. 3.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
524	524	0		526			526			531			539			541	
	524			526		525	527	−2		531		(539)	539	(0)	541	541	0
	525		(525)	526	(−1)		527			531			539			541	
	525		523	526	−3		527			532		537	540	−3		541	
	525			526			527		(538)	532	(+6)		540			541	
(528)	524	(+4)		525			527			532			540			541	
	524			525		(535)	526	(+9)	533	532	+1		540		(546)	541	(+5)
524	525	−1		525			526			533			540			541	
	525			525		527	526	+1		533		(545)	540	(+5)	541	541	0
	525		(529)	525	(+4)		526			533			540			541	
	525			525			526			533		541	540	+1		541	
	525		525	525	0		526		(534)	534	(0)		540			541	
(525)	526	(−1)		525			527			534			540			541	
	526			525		(533)	528	(+5)	536	534	+2		540		(540)	541	(−1)
526	526	0		524			528			535			540			541	
	526			525		523	529	−6		535		(542)	540	(+2)	540	541	−1
	526		(527)	525	(+2)		529			535			541			541	
	526			526			529			535		538	541	−3		541	
	526		526	526	0		529			536			541			541	
(530)	526	(+4)		526			529			537			541			541	
	526			526		(527)	530	(−3)	539	537	+2		541		(540)	541	(−1)
525	526	−1		526			530			538			541			541	
	526			526		526	530	−4		538		(545)	542	(+3)	544	541	+3
	526			526			530			538			542			540	
	526			527			530			538		538	541	−3		540	
	526		522	527	−5		530		(542)	538	(+4)		541			540	
(529)	526	(+3)		527			530			538			541			541	
	526			527			530		536	538	−2		541		(539)	541	(−2)
522	526	−4		527			530			539			541			541	
	526			527		527	531	−4		539		(540)	541	(−1)	539	541	−2
	526		(526)	526	(0)					539						541	
524	525	±1	524	526	±2	526	528	±3	536	535	±2	538	540	±2	541	541	±1
(528)		(±3)	(527)		(±2)	(532)		(±6)	(538)		(±3)	(542)		(±3)	(541)		(±2)

TABLE IVe.—*Base line values of the Horizontal Force Magnetograph derived*

36000γ+ **1915.**

1915.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 ..		542		(547)	546	(+1)		549			555			562			567	
2 ..		542			546			550			555			562		572	568	+4
3 ..		542		543	546	−3	551	550	+1		556		(557)	563	(−6)		568	
4 ..	(538)	542	(−4)		546			551			556			563			569	
5 ..		542			546			551		(553)	556	(−3)	566	563	+3		569	
6 ..	540	542	−2		546			551			556			563			569	
7 ..		543			546			551		554	556	−2		563		(561)	569	(−8)
8 ..		543			546		(555)	551	(+4)		556			564			569	
9 ..		543		(548)	546	(+2)		551			556			564		567	569	−2
10 ..		543		544	546	−2	549	551	−2		556		(566)	564	(+2)		569	
11 ..	(542)	543	(−1)		546			552			557			564			570	
12 ..		543			546			552		(561)	557	(+4)	569	565	+4		570	
13 ..	549	543	+6		546			552			557			565			569	
14 ..		543			546			552		554	557	−3		565		(574)	569	(+5)
15 ..		544		(547)	547	(0)	(556)	552	(+4)		557			565			569	
16 ..		544			547			553			557			566		568	570	−2
17 ..		544		547	547	0	551	553	−2		558		(563)	666	(−3)		570	
18 ..	(545)	544	(+1)		547			553			558			566			570	
19 ..		544			547			554		(558)	558	(0)	569	566	+3		570	
20 ..	546	544	+2		547			554			558			567			570	
21 ..		545			548			554		562	559	+3		567		(575)	570	(+5)
22 ..		545		(549)	548	(+1)	(560)	554	(+6)		559			567			570	
23 ..		545			548			554			560			567		571	570	+1
24 ..		545		544	549	−5	552	554	−2		560		(562)	567	(−5)		570	
25 ..	(549)	545	(+4)		549			554			560			567			571	
26 ..		546			549			555		(558)	561	(−3)	573	567	+6		571	
27 ..	543	546	−3		549			555			561			567			571	
28 ..		546			549			555		562	561	+1		568		(569)	571	(−2)
29 ..		546					(556)	555	(+1)		561			568			571	
30 ..		546						555			561			568		571	571	0
31 ..		546					554	555	−1				(566)	567	(−1)			
Means ..	544	544	±3	544	547	±2	551	553	±2	558	557	±2	569	565	±4	570	570	±2
	(543)		(±2)	(548)		(±1)	(557)		(±4)	(557)		(±2)	(563)		(±3)	(570)		(±5)

from Observations of Horizontal Force with Instrument No. 7 and Instrument No. 3.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
	571			569		575	571	+4		575			579		588	582	+6
	571		(575)	568	(+7)		571			575		(579)	580	(−1)		582	
	571			568			571			575		582	580	+2		582	
	571		564	568	−4		571		(572)	575	(−3)		580			582	
(574)	571	(+3)		568			572			575			580			582	
	571			568		(567)	572	(−5)	577	575	+2		580		(583)	582	(+1)
568	571	−3		568			572			575			580			582	
	571			568		574	572	+2		576			580		577	582	−5
	570		(566)	568	(−2)		572			576			581			582	
	570			568			572			576		579	581	−2		582	
	570		562	568	−6		572		(577)	577	(0)		581			581	
(569)	570	(−1)		568			572			577			581			581	
	570			569		(569)	572	(−3)	576	577	−1		581		(577)	581	(−4)
569	570	−1		569			572			577			581			581	
	570			569		574	572	+2		577		(578)	581	(−3)	588	581	+7
	571		(569)	569	(0)		572			578			581			582	
	570			569			572			578		584	581	+3		582	
	570		568	569	−1		572		(578)	578	(0)		582			582	
(577)	570	(+7)		569			572			578			582			582	
	570			568		(574)	572	(+2)	578	578	0		581		(583)	582	(+1)
571	570	+1		569			572			578			581			582	
	569			569		570	573	−3		578			581		578	582	−4
	569		(571)	569	(+2)		573			578		(583)	581	(+2)		582	
	569			569			573			578		583	581	+2		582	
	569		570	570	0		573		(580)	579	(+1)		581			582	
(565)	569	(−4)		570			574			579			581			582	
	569			570		(572)	574	(−2)	584	579	+5		581		(580)	583	(−3)
568	569	−1		570			574			579			581			583	
	569			570		576	574	+2		579		(579)	582	(−3)	577	583	−6
	569		(573)	571	(+2)		574			579			582			583	
	569			571						579						583	
569	570	±1	566	569	±3	574	572	±3	579	577	±2	582	581	±2	582	582	±6
(571)		(±4)	(571)		(±3)	(570)		(±3)	(577)		(±1)	(580)		(±2)	(581)		(±2)

TABLE Va.—*Base line values of the Declination Magnetograph derived*

1911.

1911.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1 ..		4·6			4·8			4·4			4·8			4·7			4·4	
2 ..		4·6		4·8	4·8	0	4·6	4·4	+0·2		4·8			4·7		4·3	4·4	−0·1
3 ..		4·6			4·8			4·4			4·9			4·7			4·3	
4 ..		4·6			4·8			4·4			4·9		4·8	4·7	+0·1		4·4	
5 ..	4·5	4·5	0		4·8			4·4			4·8			4·7		4·7	4·4	+0·3
6 ..		4·5			4·8			4·3		4·8	4·8	0		4·7			4·4	
7 ..		4·5			4·8			4·4			4·8			4·7		4·4	4·4	0
8 ..		4·5			4·7			4·4			4·8			4·7			4·4	
9 ..		4·6		4·8	4·7	+0·1	4·4	4·4	0		4·8			4·7		4·3	4·3	0
10 ..		4·6			4·7			4·5			4·8			4·7			4·3	
11 ..		4·6			4·7			4·5			4·8		5·0	4·7	+0·3		4·3	
12 ..	4·5	4·6	−0·1		4·6			4·5			4·8			4·7		4·1	4·3	−0·2
13 ..		4·6			4·6			4·5		4·8	4·8	0		4·7			4·2	
14 ..		4·6			4·6			4·6			4·8			4·7		4·5	4·3	+0·2
15 ..		4·6			4·6			4·6			4·7			4·7			4·3	
16 ..		4·6		4·8	4·6	+0·2		4·6			4·7			4·7		4·0	4·3	−0·3
17 ..		4·6			4·6		4·2	4·6	−0·4		4·7			4·7			4·4	
18 ..		4·7			4·6			4·6			4·7		4·5	4·7	−0·2		4·4	
19 ..	4·6	4·7	−0·1		4·6			4·6			4·7			4·7		4·4	4·5	−0·1
20 ..		4·7			4·6			4·6		4·7	4·7	0		4·6			4·5	
21 ..		4·7			4·6			4·6			4·7			4·5		4·6	4·6	0
22 ..		4·7			4·5			4·6			4·7		4·7	4·5	+0·2		4·7	
23 ..		4·7		4·2	4·5	−0·3	5·0	4·7	+0·3		4·7			4·5		5·0	4·7	+0·3
24 ..		4·7			4·5			4·7			4·7		4·6	4·5	+0·1		4·6	
25 ..		4·7			4·5			4·7			4·7			4·5			4·6	
26 ..	4·9	4·7	+0·2		4·5			4·7			4·7		4·2	4·4	−0·2	4·8	4·6	+0·2
27 ..		4·8			4·5			4·7		4·6	4·7	−0·1		4·3			4·7	
28 ..		4·8			4·4			4·8			4·7			4·3		4·0	4·6	−0·6
29 ..		4·8						4·8			4·7		4·5	4·3	+0·2		4·6	
30 ..		4·8						4·8			4·8			4·3		4·8	4·6	+0·2
31 ..		4·8					4·9	4·8	+0·1				4·0	4·3	−0·3			
Means ..	4·62	4·65	±0·10	4·65	4·64	±0·15	4·62	4·57	±0·20	4·72	4·76	±0·02	4·54	4·59	±0·20	4·45	4·45	±0·19

Base line values are derived by converting the corresponding tabulated ordinates in Table II *a* into arc and subtracting the converted ordinates from the
The calculated values in column 2 are derived by taking overlapping means of 4 successive observations and reducing them to the proper epoch, values for
The departures of the observed from the calculated values in column 3 represent in the main the probable errors of the absolute determinations.

from observations of absolute Declination with Instrument No. 7.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2.	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	4·5			5·0		4·9	5·1	−0·2		5·1		4·4	4·7	−0·3	4·7	4·8	−0·1
	4·6		5·1	5·1	0		5·0			5·0			4·7			4·8	
4·7	4·7	0		5·2			5·0			5·0		4·6	4·6	0		4·8	
	4·8		5·3	5·2	+0·1	5·1	5·1	0	4·8	5·0	−0·2		4·6		4·6	4·8	−0·2
4·6	4·7	−0·1		5·3			5·1			4·9			4·7			4·8	
	4·7			5·3		4·8	5·1	−0·3	4·8	4·9	−0·1	4·7	4·7	0	5·0	4·9	+0·1
5·0	4·7	+0·3	5·4	5·4	0		5·1			4·9			4·8			4·9	
	4·8			5·5		5·4	5·1	+0·3		4·9		4·7	4·8	−0·1	5·0	5·0	0
	4·8			5·5			5·1		4·9	4·9	0		4·8			5·0	
4·5	4·8	−0·3		5·5			5·1			4·9		5·1	4·8	+0·3		5·0	
	4·9		5·5	5·5	0	5·1	5·2	−0·1	5·0	4·9	+0·1		4·8		5·1	5·0	+0·1
5·1	4·8	+0·3		5·5			5·2			4·9			4·8			5·1	
	4·8			5·5			5·2		4·8	4·9	−0·1	4·8	4·8	0	4·9	5·1	−0·2
4·9	4·9	0	5·9	5·5	+0·4		5·2			4·9			4·8			5·1	
	4·9			5·4		5·3	5·1	+0·2		4·9		4·6	4·7	−0·1	5·1	5·2	−0·1
	5·0		5·3	5·4	−0·1		5·1		4·9	4·9	0		4·7			5·2	
4·7	5·0	−0·3		5·4			5·1			4·9		4·6	4·6	0		5·2	
	5·0		5·0	5·3	−0·3		5·1		4·8	4·9	−0·1		4·6		5·4	5·2	+0·2
5·0	5·0	0		5·2			5·1			4·9			4·6			5·2	
	4·9			5·2		4·9	5·1	−0·2	5·0	5·0	0	4·6	4·7	−0·1	5·4	5·2	+0·2
5·4	4·9	+0·5	5·3	5·2	+0·1		5·1			5·0			4·7			5·2	
	4·9			5·2		5·2	5·1	+0·1		5·0		4·6	4·7	−0·1	5·0	5·2	−0·2
	4·9		5·2	5·2	0		5·1			5·0			4·8			5·2	
4·5	4·9	−0·4		5·2			5·1			5·0		4·9	4·8	+0·1		5·2	
	4·9		5·2	5·3	−0·1	5·1	5·2	−0·1	5·1	5·0	+0·1		4·8			5·2	
4·8	4·8	0		5·2			5·2			5·0			4·9			5·2	
	4·7			5·2		5·3	5·2	+0·1	5·0	4·9	+0·1	4·9	4·9	0	5·2	5·2	0
4·8	4·8	0		5·1			5·2			4·9			4·9			5·2	
	4·9			5·1		5·4	5·1	+0·3		4·8		5·0	4·8	+0·2	5·3	5·3	0
	4·9		5·3	5·1	+0·2		5·1		5·0	4·8	+0·2		4·8			5·3	
4·8	5·0	−0·2		5·1						4·8						5·4	
4·83	4·84	±0·18	5·32	5·28	±0·12	5·14	5·12	±0·17	4·92	4·93	±0·09	4·73	4·75	±0·10	5·06	5·09	±0·12

observed absolute Easterly Declination (1 c. m=10′28). The values so obtained of the base lines of the Declination Magnetograph denote *westerly* declination. intermediate days being obtained by simple interpolation.

TABLE Vb.—*Base line values of the Declination Magnetograph derived*

1912.

1912.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1 ..		5·4			5·6		6·3	6·2	+0·1	5·9	5·8	+0·1	4·9	5·2	−0·3		5·1	
2 ..		5·4		5·8	5·6	+0·2		6·2			5·8			5·2			5·1	
3 ..	5·5	5·4	+0·1		5·7			6·2		5·9	5·8	+0·1	5·2	5·1	+0·1		5·1	
4 ..		5·4			5·7		6·3	6·2	+0·1		5·7			5·0			5·1	
5 ..	5·5	5·4	+0·1	5·6	5·7	−0·1		6·2			5·7			5·0			5·1	
6 ..		5·4			5·7		6·0	6·2	−0·2		5·7		5·2	5·0	+0·2	5·1	5·1	0
7 ..		5·4		5·6	5·7	−0·1		6·2			5·7			5·0			5·1	
8 ..	5·4	5·4	0		5·6		6·1	6·2	−0·1	5·6	5·7	−0·1		5·0			5·1	
9 ..		5·4		5·8	5·6	+0·2		6·2			5·6			5·0			5·1	
10 ..		5·4			5·7			6·2		5·6	5·6	0	4·5	5·0	−0·5		5·1	
11 ..		5·4			5·7		6·3	6·2	+0·1		5·6			5·0			5·1	
12 ..	5·3	5·4	−0·1	5·3	5·7	−0·4		6·2			5·5			5·0			5·2	
13 ..		5·5			5·7		6·2	6·2	0		5·5			5·0		5·1	5·2	−0·1
14 ..		5·4		5·9	5·7	+0·2		6·1			5·5		5·0	5·0	0		5·2	
15 ..	5·5	5·4	+0·1		5·7		6·1	6·1	0		5·4		5·3	5·1	+0·2		5·2	
16 ..		5·4			5·7			6·0		5·6	5·4	+0·2	5·2	5·1	+0·1		5·2	
17 ..	5·6	5·4	+0·2		5·7			6·0			5·4			5·2			5·2	
18 ..		5·5			5·8			5·9		5·3	5·3	0		5·2			5·2	
19 ..	5·3	5·5	−0·2	5·8	5·8	0	5·9	5·9	0	5·2	5·3	−0·1		5·2			5·2	
20 ..		5·5			5·8			5·9			5·3			5·2		5·4	5·2	+0·2
21 ..		5·5		5·7	5·9	−0·2	5·7	5·9	−0·2		5·2			5·2			5·3	
22 ..	5·5	5·5	0		5·9		6·0	5·9	+0·1	5·2	5·2	0		5·2			5·3	
23 ..		5·4		6·1	5·9	+0·2		5·9			5·2		5·1	5·1	0		5·3	
24 ..	5·6	5·5	+0·1		6·0			5·9		5·1	5·2	−0·1		5·1			5·3	
25 ..		5·5			6·0		6·0	5·9	+0·1		5·2			5·1			5·3	
26 ..	5·3	5·5	−0·2	6·0	6·1	−0·1		5·9		5·0	5·1	−0·1		5·1			5·4	
27 ..		5·5			6·1			5·9			5·1			5·1		5·1	5·4	−0·3
28 ..		5·5		6·1	6·1	0		5·9			5·1			5·1			5·4	
29 ..	5·5	5·5	0		6·2		5·8	5·9	−0·1	5·3	5·1	+0·2		5·1			5·4	
30 ..		5·5						5·9			5·1		5·0	5·1	−0·1		5·5	
31 ..	5·6	5·6	0					5·8						5·1				
Means ..	5·47	5·45	±0·09	5·79	5·80	±0·15	6·06	6·04	±0·09	5·43	5·43	±0·09	5·04	5·09	±0·17	5·17	5·22	±0·15

from observations of absolute Declination with Instrument No. 7.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	5·5		6·4	6·3	+0·1		6·8			6·4			6·5			7·0	
	5·5			6·3			6·8			6·4			6·6			7·0	
	5·5			6·3			6·8		6·8	6·4	+0·4		6·6			7·1	
5·6	5·5	+0·1		6·3			6·8			6·4			6·6			7·1	
	5·6			6·4			6·8			6·4			6·6		7·0	7·1	−0·1
	5·6			6·4		6·6	6·8	−0·2		6·3			6·6			7·1	
	5·6			6·4			6·8			6·3		6·7	6·6	+0·1		7·1	
	5·6		6·5	6·4	+0·1		6·8			6·3			6·6			7·2	
	5·7			6·5			6·9			6·3			6·6			7·2	
	5·7			6·5			6·8		6·1	6·3	−0·2		6·6			7·2	
5·7	5·7	0		6·5			6·8			6·4			6·7			7·3	
	5·8			6·5		7·2	6·8	+0·4		6·4			6·7		7·5	7·3	+0·2
	5·8			6·5			6·8			6·4			6·7			7·3	
	5·8			6·6			6·7			6·4		6·8	6·7	+0·1		7·4	
	5·9		6·5	6·6	−0·1		6·7			6·4			6·7			7·4	
	5·9			6·6			6·7			6·3			6·8			7·4	
	5·9			6·6			6·7			6·3			6·8			7·5	
5·9	5·9	0		6·6			6·7		6·2	6·3	−0·1		6·8			7·5	
	6·0			6·6		6·8	6·7	+0·1		6·3			6·8		7·2	7·6	−0·4
	6·0			6·6			6·7			6·3			6·8			7·6	
	6·0			6·6			6·7			6·3		6·6	6·8	−0·2		7·6	
	6·0		6·6	6·6	0		6·7			6·3			6·8			7·7	
	6·1			6·6			6·7			6·3			6·8			7·7	
	6·1			6·6			6·7		6·4	6·4	0		6·8			7·7	
6·0	6·1	−0·1		6·6			6·6			6·4			6·9			7·7	
	6·2			6·6		6·2	6·6	−0·4		6·4			6·9		7·9	7·8	+0·1
	6·2			6·7			6·6			6·4			6·9			7·8	
	6·2			6·7			6·5			6·4		6·9	6·9	0		7·8	
	6·2		6·8	6·7	+0·1		6·5			6·5			7·0			7·8	
	6·2			6·7			6·5			6·5			7·0			7·8	
	6·3			6·8					6·4	6·5	−0·1					7·9	
5·80	5·87	±0·05	6·56	6·54	±0·08	6·70	6·72	±0·27	6·38	6·37	±0·16	6·75	6·74	±0·10	7·40	7·44	±0·20

TABLE Vc.—*Base line values of the Declination Magnetograph derived*

1913.

1913.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 ..		8·0			8·8			9·0			8·4		7·6	7·6	0		7·0	
2 ..		8·0			8·8			9·0			8·4			7·6			7·0	
3 ..	8·2	8·1	+0·1		8·8			9·0		8·3	8·4	−0·1		7·6			7·0	
4 ..		8·1			8·8			9·0			8·3			7·6			7·0	
5 ..		8·2			8·8			9·0			8·3			7·5		6·7	7·0	−0·3
6 ..		8·2		8·9	8·8	+0·1		9·0			8·3			7·5			7·0	
7 ..		8·2			8·8		9·1	9·0	+0·1		8·2			7·5			7·0	
8 ..		8·3			8·8			9·0			8·2		7·4	7·4	0		7·0	
9 ..	8·1	8·3	−0·2		8·9			9·0			8·2			7·4			7·0	
10 ..		8·3			8·9			8·9		8·2	8·2	0		7·3			7·0	
11 ..		8·4			8·9			8·9			8·1			7·3			7·0	
12 ..		8·4			8·9			8·9			8·1			7·3			7·0	
13 ..		8·4		8·5	8·9	+0·4	9·0	8·9	+0·1		8·1			7·3		7·3	7·0	+0·3
14 ..		8·5			8·9			8·9			8·1			7·2			7·0	
15 ..		8·5			8·9			8·9			8·0		7·3	7·2	+0·1		7·0	
16 ..	8·7	8·5	+0·2		8·9			8·9			8·0			7·2			7·0	
17 ..		8·5			8·9			8·9		7·9	8·0	−0·1		7·2			7·0	
18 ..		8·6			8·9			8·8			8·0			7·1			7·1	
19 ..		8·6			8·9			8·8			7·9			7·1		6·9	7·1	−0·2
20 ..		8·6		9·1	8·9	+0·2	8·8	8·8	0		7·9			7·1			7·1	
21 ..		8·7			8·9			8·7			7·9			7·1			7·2	
22 ..		8·7			8·9			8·7			7·9		6·9	7·0	−0·1		7·2	
23 ..	8·7	8·7	0		8·9			8·7			7·8			7·0			7·3	
24 ..		8·8			8·9			8·7		8·0	7·8	+0·2		7·0			7·3	
25 ..		8·8			8·9			8·6			7·8			7·0			7·3	
26 ..		8·8			8·9			8·6			7·8			7·0		7·1	7·3	−0·2
27 ..		8·8		8·9	8·9	0	8·6	8·6	0		7·7			7·0			7·4	
28 ..		8·8			9·0			8·5			7·7			7·0			7·4	
29 ..		8·8						8·5			7·7		7·0	7·0	0		7·4	
30 ..	8·9	8·8	+0·1					8·5			7·7			7·0			7·5	
31 ..		8·8						8·5						7·0				
Means ..	8·52	8·49	±0·12	8·85	8·87	±0·17	8·87	8·81	±0·05	8·10	8·03	±0·10	7·24	7·23	±0·04	7·00	7·12	±0·25

from observations of absolute Declination with Instrument No. 7.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
	7·5			8·6			8·6			9·6			9·5			9·9	
	7·5			8·6			8·7		9·7	9·5	+0·2		9·5			10·0	
7·8	7·6	+0·2		8·6			8·7			9·5			9·6			10·0	
	7·6			8·7			8·7			9·5			9·6		10·4	10·0	+0·4
	7·6			8·6		8·8	8·7	+0·1		9·5			9·6			10·0	
	7·7			8·6			8·7			9·4		9·8	9·6	+0·2		10·0	
	7·7			8·6			8·8			9·4			9·6			10·1	
	7·8		8·8	8·6	+0·2		8·8			9·4			9·7			10·1	
	7·8			8·6			8·8			9·4			9·7			10·1	
7·9	7·9	0		8·6			8·8		9·1	9·4	−0·3		9·7			10·1	
	8·0			8·6		8·7	8·8	−0·1		9·3			9·7		10·1	10·1	0
	8·0			8·6			8·8			9·3			9·7			10·2	
	8·1			8·6			8·8			9·3		9·5	9·6	−0·1		10·2	
	8·1		8·6	8·6	0	*	*8·8			9·3			9·6			10·2	
	8·1			8·6			9·4			9·3			9·6			10·3	
	8·1			8·6			9·4		9·3	9·3	0		9·6			10·3	
7·9	8·2	−0·3		8·6			9·4			9·3			9·6			10·3	
	8·2			8·6		9·5	9·4	+0·1		9·3			9·6		10·2	10·3	−0·1
	8·2			8·6			9·4			9·3			9·7			10·3	
	8·3			8·6			9·4			9·3		9·6	9·7	−0·1		10·3	
	8·3		8·3	8·6	−0·3		9·3			9·4			9·7			10·3	
	8·3			8·6			9·3			9·4			9·7			10·3	
	8·4			8·6			9·3		9·1	9·4	−0·3		9·8			10·3	
8·6	8·4	+0·2		8·6			9·3			9·4			9·8			10·3	
	8·4			8·6		9·3	9·3	0		9·4			9·8			10·3	
	8·4			8·6			*9·2			9·5			9·8		10·3	10·3	0
	8·5			8·6			9·6			9·5		9·5	9·8	−0·3		10·4	
	8·5		8·7	8·6	+0·1		9·6			9·5			9·9			10·4	
	8·5			8·6			9·6			9·5			9·9			10·4	
	8·5			8·6			9·6			9·5			9·9			10·4	
8·7	8·6	+0·1		8·6					9·8	9·5	+0·3					10·4	
8·18	8·09	±0·16	8·60	8·60	±0·15			±0·07	9·40	9·41	±0·22	9·60	9·69	±0·17	10·25	10·21	±0·12

* A shift in the base line of 0′·6 occurred between the 14th and the 15th September and of 0′·4 between the 26th and the 27th September.

TABLE Vd.—*Base line values of the Declination Magnetograph derived*

1914.

1914.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 ..		10·5			10·9			11·6			11·8			11·3			11·0	
2 ..	10·5	10·5	0		11·0			11·6		12·0	11·8	+0·2		11·3			11·0	
3 ..		10·5			11·0			11·6			11·8			11·3			11·1	
4 ..		10·5			11·0			11·6			11·8			11·3		11·0	11·1	−0·1
5 ..		10·6		11·2	11·1	+0·1	11·7	11·6	+0·1		11·8			11·2			11·1	
6 ..		10·6			11·1			11·6			11·9			11·2			11·1	
7 ..		10·6			11·1			11·6			11·9		10·7	11·1	−0·4		11·2	
8 ..		10·6			11·2			11·6			11·9			11·1			11·2	
9 ..	10·6	10·6	0		11·2			11·6		11·9	11·9	0		11·1			11·2	
10 ..		10·6			11·2			11·6			11·9			11·0			11·3	
11 ..		10·6			11·3			11·6			11·9			11·0		11·3	11·3	0
12 ..		10·6		11·4	11·3	+0·1		11·6			11·9			10·9			11·3	
13 ..		10·6			11·3		11·4	11·6	−0·2		11·9			10·9		*	4·7	
14 ..		10·6			11·4			11·6			11·9		10·9	10·9	0		4·8	
15 ..		10·6			11·4			11·6			11·9			10·8			4·8	
16 ..	10·9	10·6	+0·3		11·4			11·6		11·7	11·8	−0·1		10·8			4·8	
17 ..		10·6			11·5			11·6			11·8			10·8			4·9	
18 ..		10·6			11·5			11·6			11·8			10·8		5·1	4·9	+0·2
19 ..		10·6		11·5	11·5	0	11·6	11·7	−0·1		11·8			10·8			4·9	
20 ..		10·7			11·5			11·7			11·8			10·8			4·9	
21 ..		10·7			11·5			11·7			11·8		10·9	10·8	+0·1		4·9	
22 ..	10·6	10·7	−0·1		11·5			11·7			11·7			10·8			5·0	
23 ..		10·7			11·6			11·7		12·0	11·6	+0·4		10·8			5·0	
24 ..		10·8			11·6			11·7			11·6			10·8			5·0	
25 ..		10·8			11·6			11·8			11·5			10·9		5·0	5·0	0
26 ..		10·8			11·6		11·8	11·8	0		11·5			10·9			5·0	
27 ..		10·8		11·6	11·6	0		11·8			11·5			10·9			5·0	
28 ..		10·9			11·6			11·8			11·4		10·7	10·9	−0·2		5·0	
29 ..	10·6	10·9	−0·3					11·8			11·4			10·9			5·1	
30 ..		10·9						11·8		11·7	11·4	+0·3		11·0			5·1	
31 ..		10·9						11·8						11·0				
Means ..	10·64	10·66	±0·14	11·42	11·34	±0·05	11·62	11·66	±0·10	11·86	11·75	±0·20	10·80	10·97	±0·17	11·15 5·05	11·16 4·93	±0·07

* Adjustment of the zero mirror of the Declination Magnetograph was made on the 13th June.

from observations of absolute Declination with Instrument No. 7.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
	5·1			5·4			6·1		7·0	6·9	+0·1		7·5			7·3	
5·0	5·1	−0·1		5·4			6·1			6·9			7·5			7·3	
	5·1			5·4		6·3	6·1	+0·2		7·0			7·5		7·0	7·3	−0·3
	5·1			5·5			6·2			7·0			7·5			7·3	
	5·1			5·5			6·2			7·0		7·5	7·5	0		7·3	
	5·1		5·5	5·5	0		6·2			7·1			7·5			7·3	
	5·1			5·5			6·2			7·1			7·5			7·3	
	5·1			5·5			6·2		7·3	7·1	+0·2		7·5			7·3	
5·1	5·1	0		5·6			6·3			7·1			7·5			7·3	
	5·1			5·6		6·3	6·3	0		7·2			7·5		7·2	7·3	−0·1
	5·1			5·6			6·3			7·2			7·5			7·3	
	5·1			5·6			6·4			7·2		7·6	7·5	+0·1		7·3	
	5·2			5·6			6·4			7·3			7·5			7·3	
	5·2		5·4	5·6	−0·2		6·4			7·3			7·5			7·3	
	5·2			5·6			6·4		7·3	7·3	0		7·5			7·3	
5·3	5·2	+0·1		5·7			6·5			7·3			7·5			7·4	
	5·2			5·7		6·4	6·5	−0·1		7·3			7·5		7·4	7·4	0
	5·3			5·7			6·5			7·4			7·5			7·4	
	5·3			5·7			6·5			7·4		7·4	7·5	−0·1		7·4	
	5·3		5·9	5·8	+0·1		6·6			7·4			7·5			7·5	
	5·3			5·8			6·6			7·4			7·5			7·5	
	5·3			5·8			6·6		7·4	7·4	0		7·4			7·5	
	5·3			5·8			6·6			7·4			7·4			7·6	
5·3	5·4	−0·1		5·9		6·6	6·7	−0·1		7·4			7·4		7·5	7·6	−0·1
	5·4			5·9			6·7			7·4			7·4			7·6	
	5·4			5·9			6·8			7·5		7·6	7·4	+0·2		7·7	
	5·4		5·8	6·0	−0·2		6·8			7·5			7·4			7·7	
	5·4			6·0			6·8			7·5			7·3			7·7	
	5·4			6·0			6·8		7·6	7·5	+0·1		7·3			7·8	
5·5	5·4	+0·1		6·0			6·9			7·5			7·3			7·8	
	5·4			6·1						7·5					7·8	7·9	−0·1
5·24	5·23	±0·08	5·65	5·70	±0·12	6·40	6·44	±0·10	7·32	7·27	±0·08	7·52	7·46	±0·10	7·38	7·45	±0·12

TABLE V*e*—*Base line values of the Declination Magnetograph derived*

1915.

1915.	January.			February.			March.			April.			May.			June.		
Date.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 ..		7·9			8·6			9·4		9·4	9·5	−0·1		9·0			8·9	
2 ..		7·9			8·7			9·4			9·5			9·0			8·9	
3 ..		8·0			8·7			9·4			9·5			9·0		9·0	8·9	+0·1
4 ..		8·0		8·3	8·8	−0·5	9·3	9·4	−0·1		9·5			9·0			8·9	
5 ..		8·0			8·8			9·4			9·5			9·0			8·9	
6 ..		8·1			8·8			9·5			9·5		8·7	9·0	−0·3		8·9	
7 ..	8·1	8·1	0		8·8			9·5			9·5			8·9			8·9	
8 ..		8·1			8·8			9·5		9·6	9·5	+0·1		8·9			8·9	
9 ..		8·1			8·9			9·5			9·5			8·9			8·9	
10 ..		8·2			8·9			9·5			9·5			8·9		9·1	8·9	+0·2
11 ..		8·2		9·1	8·9	+0·2	9·7	9·5	+0·2		9·5			8·9			8·9	
12 ..		8·2			8·9			9·5			9·5			8·9			8·9	
13 ..		8·2			8·9			9·5			9·5		9·0	8·9	+0·1		8·9	
14 ..		8·3			9·0			9·5			9·5			8·9			8·8	
15 ..	8·5	8·3	+0·2		9·0			9·5		9·4	9·4	0		8·8			8·8	
16 ..		8·3			9·0			9·5			9·4			8·8			8·8	
17 ..		8·4			9·1			9·6			9·4			8·8		8·8	8·8	0
18 ..		8·4		9·1	9·1	0	9·7	9·6	+0·1		9·4			8·9			8·8	
19 ..		8·4			9·1			9·6			9·3			8·9			8·8	
20 ..		8·4			9·2			9·6			9·3		9·0	8·9	+0·1		8·8	
21 ..	8·2	8·4	−0·2		9·2			9·6			9·3			8·9			8·7	
22 ..		8·4			9·2			9·6		9·6	9·2	+0·4		8·9			8·7	
23 ..		8·4			9·3			9·6			9·2			8·9			8·7	
24 ..		8·4			9·3			9·6			9·2			8·9		8·5	8·7	−0·2
25 ..		8·4		9·3	9·3	0		9·6			9·1			8·9			8·7	
26 ..		8·5			9·3		9·5	9·6	−0·1		9·1			8·9			8·6	
27 ..		8·5			9·3			9·6			9·1		8·7	8·9	−0·2		8·6	
28 ..	8·7	8·6	+0·1		9·3			9·6			9·1			8·9			8·6	
29 ..		8·5						9·6		8·9	9·1	−0·2		9·0			8·6	
30 ..		8·6						9·5			9·1			9·0			8·6	
31 ..		8·6						9·5						9·0				
Means.	8·37	8·28	±0·12	8·95	9·01	±0·17	9·55	9·53	±0·12	9·38	9·36	±0·16	8·85	8·92	±0·17	8·85	8·79	±0·12

from observations of absolute Declination with Instrument No. 7.

July.			August.			September.			October.			November.			December.		
Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.	Observed.	Calculated.	Observed less calculated.
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
8·7	8·7	0		9·3			9·9			10·1			3·1			3·1	
	8·7			9·3			9·9			10·1			3·1		2·9	3·1	−0·2
	8·7			9·3		9·9	9·9	0		10·1			3·1			3·1	
	8·7			9·4			10·0			10·1		3·5	3·1	+0·4		3·1	
	8·7		9·5	9·4	+0·1		10·0			10·1			3·2			3·1	
	8·7			9·4			10·0			10·1			3·2			3·2	
	8·7			9·4			10·0		10·2	10·1	+0·1		3·2			3·2	
8·5	8·7	−0·2		9·5			10·0			10·1			3·2			3·2	
	8·7			9·5			10·0			10·1			3·2		3·5	3·2	+0·3
	8·8			9·5		10·1	10·0	+0·1		10·1			3·2			3·3	
	8·8			9·6			10·0			10·1		3·2	3·2	0		3·3	
	8·8		9·7	9·6	+0·1		10·0			10·2			3·2			3·3	
	8·8			9·6			10·0			10·2			3·2			3·3	
	8·8			9·7			10·0			10·2			3·2			3·4	
9·1	8·8	+0·3		9·7			10·0		10·1	10·2	−0·1		3·2			3·4	
	8·9			9·7		10·0	10·1	−0·1		10·2			3·1		3·4	3·4	0
	8·9			9·7			10·1			10·2			3·1			3·4	
	8·9			9·7			10·1			10·3		3·3	3·1	+0·2		3·5	
	8·9		9·6	9·7	−0·1		10·1			10·3			3·1			3·5	
	9·0			9·8			10·1			10·3			3·1			3·5	
	9·0			9·8			10·1		10·1	10·4	−0·3		3·0			3·5	
9·0	9·0	0		9·8			10·1			10·4			3·1			3·5	
	9·1			9·8		10·1	10·1	0		10·5			3·1		3·5	3·5	0
	9·1			9·8			10·1			10·5			3·1			3·5	
	9·1			9·8			10·1		*	2·8		2·8	3·1	−0·3		3·5	
	9·2		9·9	9·8	+0·1		10·1			2·8			3·1			3·5	
	9·2			9·9			10·1			2·9			3·1			3·5	
	9·2			9·9			10·1		3·0	2·9	+0·1		3·1			3·6	
9·0	9·2	−0·2		9·9			10·2			3·0			3·1			3·6	
	9·2			9·9		10·2	10·1	+0·1		3·0			3·1		3·6	3·6	0
	9·2			9·9						3·0						3·6	
8·86	8·91	±0·14	9·67	9·65	±0·10	10·06	10·04	±0·06	10·13 / 3·00	10·21 / 2·91	±0·15	3·20	3·13	±0·22	3·38	3·37	±0·10

* Adjustment of the zero mirror of the Declination Magnetograph was made on the 25th October.

TABLE V*f*—*Base line values of the Declination Magnetograph derived from*

1911.

Date.	Observed.	Calculated.	Difference.	Excesses of the differences in column 4 over the mean difference for the year.
1	2	3	4	5
	′	′	′	′
Jan. 5	5·3	4·5	−0·8	0
„ 12	5·4	4·6	−0·8	0
„ 19	4·9	4·7	−0·2	+0·6
„ 26	5·6	4·7	−0·9	−0·1
Feb. 2	5·5	4·8	−0·7	+0·1
„ 9	5·9	4·7	−1·2	−0·4
„ 16	5·5	4·6	−0·9	−0·1
„ 23	5·5	4·5	−1·0	−0·2
Mar. 2	5·6	4·4	−1·2	−0·4
„ 9	6·1	4·4	−1·7	−0·9
„ 17	6·0	4·6	−1·4	−0·6
„ 31	5·3	4·8	−0·5	+0·3
Apr. 6	5·2	4·8	−0·4	+0·4
„ 13	5·1	4·8	−0·3	+0·5
„ 20	5·0	4·7	−0·3	+0·5
„ 27	4·9	4·7	−0·2	+0·6
May 4	4·6	4·7	+0·1	+0·9
„ 11	4·6	4·7	+0·1	+0·9
„ 18	4·8	4·7	−0·1	+0·7
„ 23	5·5	4·5	−1·0	−0·2
„ 25	5·1	4·5	−0·6	+0·2
„ 27	5·1	4·3	−0·8	0
„ 30	5·1	4·3	−0·8	0
June 1	5·3	4·4	−0·9	−0·1
„ 6	4·6	4·4	−0·2	+0·6
„ 8	4·6	4·4	−0·2	+0·6
„ 10	4·6	4·3	−0·3	+0·5
„ 15	4·9	4·3	−0·6	+0·2
„ 17	4·7	4·4	−0·3	+0·5
„ 20	5·8	4·5	−1·3	−0·5
„ 24	4·2	4·6	+0·4	+1·2
„ 27	4·5	4·7	+0·2	+1·0
„ 29	5·2	4·6	−0·6	+0·2
July 1	4·6	4·5	−0·1	+0·7
„ 4	4·9	4·8	−0·1	+0·7
„ 6	5·0	4·7	−0·3	+0·5
„ 8	5·0	4·8	−0·2	+0·6
„ 11	5·4	4·9	−0·5	+0·3
„ 13	5·6	4·8	−0·8	0
„ 15	5·2	4·9	−0·3	+0·5
„ 18	5·7	5·0	−0·7	+0·1
„ 20	5·0	4·9	−0·1	+0·7
„ 22	5·0	4·9	−0·1	+0·7
„ 25	5·4	4·9	−0·5	+0·3
„ 27	5·0	4·7	−0·3	+0·5
„ 29	4·9	4·9	0	+0·8
Aug. 1	5·7	5·0	−0·7	+0·1
„ 3	5·3	5·2	−0·1	+0·7
„ 5	5·1	5·3	+0·2	+1·0
„ 8	5·4	5·5	+0·1	+0·9
„ 10	5·6	5·5	−0·1	+0·7
„ 12	5·8	5·5	−0·3	+0·5
„ 15	5·8	5·4	−0·4	+0·4

Date.	Observed.	Calculated.	Difference.	Excesses of the differences in column 4 over the mean difference for the year.
1	2	3	4	5
	′	′	′	′
Aug. 19	5·5	5·2	−0·3	+0·5
„ 22	5·9	5·2	−0·7	+0.1
„ 24	6·1	5·2	−0·9	−0·1
„ 26	5·8	5·2	−0·6	+0·2
„ 31	5·9	5·1	−0·8	0
Sept. 2	5·2	5·0	−0·2	+0·6
„ 5	6·4	5·1	−1·3	−0·5
„ 7	6·4	5·1	−1·3	−0·5
„ 9	6·5	5·1	−1·4	−0·6
„ 14	5·9	5·2	−0·7	+0·1
„ 16	5·8	5·1	−0·7	+0·1
„ 19	5·7	5·1	−0·6	+0·2
„ 21	5·9	5·1	−0·8	0
„ 23	6·5	5·1	−1·4	−0·6
„ 26	6·7	5·2	−1·5	−0·7
„ 28	6·1	5·2	−0·9	−0.1
„ 30	5·9	5·1	−0·8	0
Oct. 3	5·9	5·0	−0·9	−0·1
„ 5	6·5	4·9	−1·6	−0·8
„ 7	5·7	4·9	−0·8	0
„ 10	6·3	4·9	−1·4	−0·6
„ 12	5·9	4·9	−1·0	−0·2
„ 14	6·1	4·9	−1·2	−0·4
„ 17	6·0	4·9	−1·1	−0·3
„ 19	5·9	4·9	−1·0	−0·2
„ 26	6·1	5·0	−1·1	−0·3
„ 28	5·5	4·9	−0·6	+0·2
„ 31	6·2	4·8	−1·4	−0·6
Nov. 2	6·3	4·7	−1·6	−0·8
„ 4	5·7	4·6	−1·1	−0·3
„ 7	6·4	4·8	−1·6	−0·8
„ 9	5·7	4·8	−0·9	−0·1
„ 11	6·1	4·8	−1·3	−0·5
„ 14	6·1	4·8	−1·3	−0·5
„ 16	6·1	4·7	−1·4	−0·6
„ 18	6·2	4·6	−1·6	−0·8
„ 21	6·1	4·7	−1·4	−0·6
„ 23	5·8	4·8	−1·0	−0·2
„ 25	5·9	4·8	−1·1	−0·3
„ 28	6·1	4·9	−1·2	−0·4
„ 30	5·5	4·8	−0·7	+0·1
Dec. 2	5·7	4·8	−0·9	−0·1
„ 5	5·7	4·8	−0·9	−0·1
„ 9	6·3	5·0	−1·3	−0·5
„ 14	6·6	5·1	−1·5	−0·7
„ 16	6·4	5·2	−1·2	−0·4
„ 19	5·7	5·2	−0·5	+0·3
„ 21	6·6	5·2	−1·4	−0·6
„ 23	6·8	5·2	−1·6	−0·8
„ 26	6·3	5·2	−1·1	−0·3
„ 28	6·8	5·2	−1·6	−0·8
„ 30	6·3	5·3	−1·0	−0·2
Means ..	5·63	4·86	−0·77	+0·42

1912.

Date.	Observed.	Calculated.	Difference.	Excesses of the differences in column 4 over the mean difference for the year.
1	2	3	4	5
	′	′	′	′
Jan. 4	6·5	5·4	−1·1	−0·1
„ 6	6·1	5·4	−0·7	+0·3
„ 9	6·6	5·4	−1·2	−0·2
„ 11	6·7	5·4	−1·3	−0·3
„ 13	6·7	5·5	−1·2	−0·2
„ 16	6·8	5·4	−1·4	−0·4
„ 18	6·8	5·5	−1·3	−0·3
„ 20	7·2	5·5	−1·7	−0·7
„ 23	6·7	5·4	−1·3	−0·3
„ 25	7·0	5·5	−1·5	−0·5
„ 27	7·0	5·5	−1·5	−0·5
„ 30	6·6	5·5	−1·1	−0·1
Feb. 1	7·1	5·6	−1·5	−0·5
„ 3	7·1	5·7	−1·4	−0·4
„ 6	6·7	5·7	−1·0	0
„ 8	6·4	5·6	−0·8	+0·2
„ 10	6·8	5·7	−1·1	−0·1
„ 13	7·2	5·7	−1·5	−0·5
„ 15	6·9	5·7	−1·2	−0·2
„ 17	7·1	5·7	−1·4	−0·4
„ 20	6·9	5·8	−1·1	−0·1
„ 22	7·2	5·9	−1·3	−0·3
„ 24	7·0	6·0	−1·0	0
„ 27	7·2	6·1	−1·1	−0·1
„ 29	7·2	6·2	−1·0	0
Mar. 5	7·8	6·2	−1·6	−0·6
„ 7	6·9	6·2	−0·7	+0·3
„ 9	7·3	6·2	−1·1	−0·1
„ 12	7·6	6·2	−1·4	−0·4
„ 14	7·1	6·1	−1·0	0
„ 18	6·9	5·9	−1·0	0
„ 20	6·9	5·9	−1·0	0
23	7·2	5·9	−1·3	−0·3
„ 26	6·9	5·9	−1·0	0
„ 28	7·1	5·9	−1·2	−0·2
„ 30	7·3	5·9	−1·4	−0·4
Apr. 2	6·5	5·8	−0·7	+0·3
„ 4	7·0	5·7	−1·3	−0·3
„ 9	6·9	5·6	−1·3	−0·3
„ 11	6·4	5·6	−0·8	+0·2
„ 13	7·0	5·5	−1·5	−0·5
„ 15	6·2	5·4	−0·8	+0·2
„ 17	6·1	5·4	−0·7	+0·3
„ 20	6·2	5·3	−0·9	+0·1
„ 23	6·3	5·2	−1·1	−0·1
„ 25	6·2	5·2	−1·0	0
„ 27	6·7	5·1	−1·6	−0·6
„ 30	5·9	5·1	−0·8	+0·2
Means ..				

Date.	Observed.	Calculated.
1	2	3
	′	′
May 2	6·5	5·2
„ 4	5·9	5·0
„ 7	6·2	5·0
„ 9	5·9	5·0
„ 11	5·9	5·0
„ 13	6·0	5·0
„ 16	6·6	5·1
„ 23	5·7	5·1
„ 30	6·1	5·1
June 6	5·6	5·1
„ 13	5·5	5·2
„ 20	6·0	5·2
„ 27	6·4	5·4
July 4	6·8	5·5
„ 11	6·5	5·7
„ 18	6·8	5·9
„ 25	7·1	6·1
Aug. 1	7·1	6·3
„ 8	7·3	6·4
„ 15	7·2	6·6
„ 22	6·9	6·6
„ 29	7·0	6·7
Sept. 6	6·9	6·8
„ 12	7·6	6·8
„ 19	7·1	6·7
„ 26	6·7	6·6
Oct. 3	7·2	6·4
„ 10	6·9	6·3
„ 18	7·1	6·3
„ 24	6·9	6·4
„ 31	6·9	6·5
Nov. 7	7·2	6·6
„ 14	7·5	6·7
„ 21	7·3	6·8
„ 28	7·8	6·9
Dec. 5	7·5	7·1
„ 12	8·1	7·3
„ 19	7·9	7·6
„ 26	8·3	7·8
Means ..	6·83	5·86

Base line values are derived by converting the corresponding tabulated ordinates in Table II*b* into arc and subtracting the converted ordinates from the observed The calculated values in column 3 are the same as those derived from Instrument No. 7 and given in column 2, Tables V*a* to V*e*, and the differences in column 4 would represent for that year the difference due to (1), the excesses over this mean of the values of the differences for each observation which are given in column 5 would represent A shift in the base line of 0′·6 and of 0′·4 occurred on the 15th and the 27th September 1913. Adjustment of the zero mirror of the Declination Magnetograph was made

observations of absolute Declination with Instrument No. 3.

Difference.	Excesses of the differences in column 4 over the mean difference for the year.	1913. Date.	Observed.	Calculated.	Difference.	Excesses of the differences in column 4 over the mean differences for the year.	1914. Date.	Observed.	Calculated.	Difference.	Excesses of the differences in column 4 over the mean difference for the year.	1915. Date.	Observed.	Calculated.	Difference.	Excesses of the differences in column 4 over the mean differences for the year.
4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
′	′		′	′	′	′		′	′	′	′		′	′	′	′
−1·3	−0·3	Jan. 3	8·6	8·1	−0·5	−0·3	Jan. 2	10·6	10·5	−0·1	+0·1	Jan. 7	7·9	8·1	+0·2	+0·2
−0·9	+0·1	„ 9	8·6	8·3	−0·3	−0·1	„ 9	10·6	10·6	0	+0·2	„ 15	8·2	8·3	+0·1	+0·1
−1·2	−0·2	„ 16	8·7	8·5	−0·2	0	„ 16	10·9	10·6	−0·3	−0·1	„ 21	8·5	8·4	−0·1	−0·1
−0·9	+0·1	„ 23	8·9	8·7	−0·2	0	„ 22	10·8	10·7	−0·1	+0·1	„ 28	8·3	8·6	+0·3	+0·3
−0·9	+0·1	„ 30	9·0	8·8	−0·2	0	„ 29	10·6	10·9	+0·3	+0·5					
−1·0	0											Feb. 4	8·6	8·8	+0·2	+0·2
−1·5	−0·5	Feb. 6	9·1	8·8	−0·3	−0·1	Feb. 5	11·0	11·1	+0·1	+0·3	„ 11	8·9	8·9	0	0
−0·6	+0·4	„ 13	9·1	8·9	−0·2	0	„ 12	11·4	11·3	−0·1	+0·1	„ 18	8·8	9·1	+0·3	+0·3
−1·0	0	„ 20	9·7	8·9	−0·8	−0·6	„ 19	11·3	11·5	+0·2	+0·4	„ 25	9·3	9·3	0	0
		„ 27	9·4	8·9	−0·5	−0·3	„ 27	11·4	11·6	+0·2	+0·4					
												Mar. 4	9·8	9·4	−0·4	−0·4
		Mar. 7	9·6	9·0	−0·6	−0·4	Mar. 5	11·1	11·6	+0·5	+0·7	„ 11	9·5	9·5	0	0
−0·5	+0·5	„ 13	9·0	8·9	−0·1	+0·1	„ 13	11·5	11·6	+0·1	+0·3	„ 18	9·7	9·6	−0·1	−0·1
−0·3	+0·7	„ 20	8·6	8·8	+0·2	+0·4	„ 19	12·1	11·7	−0·4	−0·2	„ 26	9·2	9·6	+0·4	+0·4
−0·8	+0·2	„ 27	8·5	8·6	+0·1	+0·3	„ 26	11·9	11·8	−0·1	+0·1					
−1·0	0											Apr. 1	8·8	9·5	+0·7	+0·7
		Apr. 3	9·0	8·4	−0·6	−0·4	Apr. 2	12·1	11·8	−0·3	−0·1	„ 8	9·0	9·5	+0·5	+0·5
		„ 10	8·7	8·2	−0·5	−0·3	„ 9	12·0	11·9	−0·1	+0·1	„ 15	8·7	9·4	+0·7	+0·7
		„ 17	8·4	8·0	−0·4	−0·2	„ 16	11·8	11·8	0	+0·2	„ 22	8·9	9·2	+0·3	+0·3
−1·3	−0·3	„ 24	8·4	7·8	−0·6	−0·4	„ 23	12·1	11·6	−0·5	−0·3	„ 29	9·0	9·1	+0·1	+0·1
−0·8	+0·2						„ 30	11·8	11·4	−0·4	−0·2					
−0·9	+0·1	May 1	8·2	7·6	−0·6	−0·4						May 6	9·0	9·0	0	0
−1·0	0	„ 8	8·1	7·4	−0·7	−0·5	May 7	11·4	11·1	−0·3	−0·1	„ 13	9·2	8·9	−0·3	−0·3
		„ 15	7·5	7·2	−0·3	−0·1	„ 14	11·6	10·9	−0·7	−0·5	„ 20	9·4	8·9	−0·5	−0·5
		„ 22	7·3	7·0	−0·3	−0·1	„ 21	11·4	10·8	−0·6	−0·4	„ 27	9·1	8·9	−0·2	−0·2
		„ 29	7·5	7·0	−0·5	−0·3	„ 28	11·1	10·9	−0·2	0					
−0·8	+0·2											June 3	9·3	8·9	−0·4	−0·4
−0·9	+0·1	June 5	7·2	7·0	−0·2	0	June 4	11·5	11·1	−0·4	−0·2	„ 10	8·8	8·9	+0·1	+0·1
−0·6	+0·4	„ 13	7·4	7·0	−0·4	−0·2	„ 11	11·9	11·3	−0·6	−0·4	„ 17	8·5	8·8	+0·3	+0·3
−0·3	+0·7	„ 19	7·9	7·1	−0·8	−0·6	„ 18	5·7	4·9	−0·8	−0·6	„ 24	8·5	8·7	+0·2	+0·2
−0·3	+0·7	„ 26	7·5	7·3	−0·2	0	„ 25	5·7	5·0	−0·7	−0·5					
												July 1	8·4	8·7	+0·3	+0·3
		July 3	8·3	7·6	−0·7	−0·5	July 2	5·6	5·1	−0·5	−0·3	„ 8	8·6	8·7	+0·1	+0·1
		„ 10	8·0	7·9	−0·1	+0·1	„ 9	5·7	5·1	−0·6	−0·4	„ 15	9·3	8·8	−0·5	−0·5
−0·1	+0·9	„ 17	8·0	8·2	+0·2	+0·4	„ 16	6·0	5·2	−0·8	−0·6	„ 22	9·1	9·0	−0·1	−0·1
−0·8	+0·2	„ 24	8·9	8·4	−0·5	−0·3	„ 24	6·0	5·4	−0·6	−0·4	„ 29	9·3	9·2	−0·1	−0·1
−0·4	+0·6	„ 31	8·9	8·6	−0·3	−0·1	„ 30	6·1	5·4	−0·7	−0·5					
−0·1	+0·9											Aug. 5	9·3	9·4	+0·1	+0·1
		Aug. 8	9·0	8·6	−0·4	−0·2	Aug. 6	6·1	5·5	−0·6	−0·4	„ 12	9·5	9·6	+0·1	+0·1
		„ 14	8·8	8·6	−0·2	0	„ 14	6·1	5·6	−0·5	−0·3	„ 19	9·9	9·7	−0·2	−0·2
		„ 21	8·4	8·6	+0·2	+0·4	„ 20	6·4	5·8	−0·6	−0·4	„ 26	9·9	9·8	−0·1	−0·1
−0·8	+0·2	„ 28	8·9	8·6	−0·3	−0·1	„ 27	6·5	6·0	−0·5	−0·3					
−0·6	+0·4											Sept. 3	9·7	9·9	+0·2	+0·2
−0·8	+0·2	Sept. 5	9·0	8·7	−0·3	−0·1	Sep. 3	6·8	6·1	−0·7	−0·5	„ 10	10·1	10·0	−0·1	−0·1
−0·5	+0·5	„ 11	8·9	8·8	−0·1	+0·1	„ 10	6·3	6·3	0	+0·2	„ 16	9·7	10·1	+0·4	+0·4
−0·4	+0·6	„ 18	8·8	9·4	+0·6	+0·8	„ 17	6·7	6·5	−0·2	0	„ 23	10·2	10·1	−0·1	−0·1
		„ 25	8·8	9·3	+0·5	+0·7	„ 24	7·0	6·7	−0·3	−0·1	„ 30	9·9	10·1	+0·2	+0·2
		Oct. 2	9·5	9·5	0	+0·2	Oct. 1	7·4	6·9	−0·5	−0·3	Oct. 7	10·2	10·1	−0·1	−0·1
−0·6	+0·4	„ 10	9·8	9·4	−0·4	−0·2	„ 8	7·4	7·1	−0·3	−0·1	„ 15	9·9	10·2	+0·3	+0·3
−0·8	+0·2	„ 16	8·9	9·3	+0·4	+0·6	„ 15	7·4	7·3	−0·1	+0·1	„ 21	10·1	10·4	+0·3	+0·3
−0·5	+0·5	„ 23	9·1	9·4	+0·3	+0·5	„ 22	7·3	7·4	+0·1	+0·3	„ 28	3·0	2·9	−0·1	−0·1
−0·9	+0·1	„ 31	10·1	9·5	−0·6	−0·4	„ 29	7·6	7·5	−0·1	+0·1					
												Nov. 4	3·4	3·1	−0·3	−0·3
		Nov. 6	10·2	9·6	−0·6	−0·4	Nov. 5	7·5	7·5	0	+0·2	„ 11	3·2	3·2	0	0
		„ 13	9·7	9·6	−0·1	+0·1	„ 12	7·6	7·5	−0·1	+0·1	„ 18	2·9	3·1	+0·2	+0·2
−0·4	+0·6	20	10·0	9·7	−0·3	−0·1	„ 19	7·8	7·5	−0·3	−0·1	„ 25	3·0	3·1	+0·1	+0·1
−0·8	+0·2	„ 27	9·6	9·8	+0·2	+0·4	„ 26	7·9	7·4	−0·5	−0·3					
−0·3	+0·7											Dec. 2	2·8	3·1	+0·3	+0·3
−0·5	+0·5	Dec. 4	10·2	10·0	−0·2	0	Dec. 3	7·3	7·3	0	+0·2	„ 9	3·3	3·2	−0·1	−0·1
		„ 11	10·2	10·1	−0·1	+0·1	„ 10	7·3	7·3	0	+0·2	„ 16	3·4	3·4	0	0
		18	10·3	10·3	0	+0·2	„ 17	7·2	7·4	+0·2	+0·4	„ 23	3·7	3·5	−0·2	−0·2
		„ 26	10·2	10·3	+0·1	+0·3	„ 24	7·6	7·6	0	+0·2	„ 30	4·0	3·6	−0·4	−0·4
							„ 31	7·6	7·9	+0·3	+0·5					
−0·97	+0·29	Means Jan. 3 to Sept. 11.	8·51	8·18	−0·24	+0·26	Means Jan. 2 to June 11.	11·41	11·25	−0·25	+0·28	Means Jan. 7 to Oct. 21.	9·19	9·26	+0·05	+0·22
	—	Oct 2 to Dec. 26.	9·83	9·73		—	June 18 to Dec. 31.	6·81	6·49		—	Oct. 28 to Dec. 30	3·27	3·22		—

absolute Eastely Declination (1 c.m.=10′·28). The values so obtained of the base line of the Declination Magnetograph denote *westerly* declination.
therefore represent (1) the instrumental and the site differences and (2) the probable errors of the absolute determinations. If the annual means in column 4 be taken to
the errors due to (2) (*vide* Introduction).
on the 13th June 1914 and on the 25th October 1915.

TABLE VI*a*—*Daily Means of Horizontal Force.*
1911.

36000γ+

1911.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 ..	854	834	839	854	855	847	857	861	867	873	874	866
2 ..	850	834	852	850	854	859	855	871	869	859	871	866
3 ..	841	839	840	853	855	868	858	866	867	859	855	868
4 ..	836	851	854	851	861	869	860	864	872	866	856	872
5 ..	844	846	844	859	862	851	860	862	867	865	851	872
6 ..	846	844	844	863	855	851	871	866	870	864	861	865
7 ..	848	847	849	861	**809**	858	856	869	871	857	867	857
8 ..	848	845	840	850	834	865	854	876	869	856	870	866
9 ..	840	844	847	*	850	870	855	**882**	867	853	862	873
10 ..	845	844	855	829	858	856	865	877	861	842	861	877
11 ..	842	845	861	838	859	**846**	861	877	859	**835**	866	**790**
12 ..	849	**857**	858	843	859	850	860	882	856	853	866	833
13 ..	840	848	**871**	850	866	852	869	874	854	861	**843**	848
14 ..	848	838	853	852	854	852	868	867	865	858	844	854
15 ..	855	847	858	861	825	860	873	870	868	861	851	864
16 ..	844	846	856	846	835	859	879	862	848	860	858	866
17 ..	854	849	857	**828**	839	858	874	869	857	840	857	863
18 ..	854	845	859	835	848	867	863	869	864	845	867	862
19 ..	847	848	865	839	858	871	857	868	872	847	873	867
20 ..	853	851	**816**	847	852	871	864	865	**834**	852	865	871
21 ..	**856**	823	826	845	850	868	866	866	835	857	866	870
22 ..	849	**822**	834	843	856	862	859	879	844	862	871	872
23 ..	856	827	837	843	868	862	867	845	853	869	876	872
24 ..	839	830	841	841	863	864	873	**839**	857	868	877	**879**
25 ..	**828**	837	838	853	863	867	867	851	860	864	**886**	873
26 ..	834	833	839	858	860	869	870	855	865	864	876	858
27 ..	837	839	831	**868**	856	**877**	**885**	849	862	876	872	861
28 ..	837	832	836	860	861	874	858	856	872	871	870	860
29 ..	842		841	860	**872**	866	**852**	859	**873**	877	869	868
30 ..	836		848	848	858	875	856	860	872	873	872	874
31 ..	836		850		843		859	860		**879**		862
Monthly Mean ..	844·8	840·9	846·4	849·2	852·8	862·1	863·6	865·0	861·7	860·2	865·1	862·9

In the derivation of the daily means of Horizontal Force, the calculated values of the base line of the Horizontal Force Magnetograph given in column 2, Tables IV*a* to IV*e*, have been used. These calculated values, reduced to an uniform temperature as referred to in the footnote to Table IV*a* are corrected to the mean temperature of the day, which thus gives the correct base line value for the day. The daily mean ordinate derived from twenty-four hourly tabulations of the H. F. Magnetograms, corrected for progressive change by $\frac{1}{48}$ the difference between the initial and the terminal hour (10*h* to 10*h*) are next converted into C. G. S. unit by means of the scale co-efficients for 1 c.m. of ordinate. And finally these converted ordinates added to the corrected base line values referred to above give the absolute values of the daily means of Horizontal Force.

* Owing to loss of H. F. curve this day is rejected.

TABLE VIb—*Daily Means of Horizontal Force.*

1912.

36000γ +

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 ..	867	874	872	884	880	871	878	*	880	**837**	871	885
2 ..	871	874	880	882	873	873	881	869	885	870	868	**866**
3 ..	876	870	884	874	872	869	**891**	867	**888**	877	877	877
4 ..	878	872	876	884	880	872	866	870	871	878	877	876
5 ..	873	880	880	871	863	872	**863**	872	872	882	875	881
6 ..	876	881	876	855	866	881	870	**832**	870	881	871	878
7 ..	**884**	876	873	863	870	**888**	871	858	877	884	866	867
8 ..	879	872	862	869	865	**866**	874	866	883	880	874	868
9 ..	878	874	864	882	873	867	872	870	874	878	**886**	872
10 ..	873	867	**856**	865	879	872	878	874	871	876	856	871
11 ..	865	869	872	875	882	871	880	869	876	868	857	875
12 ..	**852**	866	869	880	860	874	883	871	869	872	869	877
13 ..	858	865	877	871	**856**	874	884	880	871	871	883	885
14 ..	861	870	**889**	884	860	871	888	875	877	854	**836**	878
15 ..	864	869	881	**844**	863	876	881	877	877	856	864	878
16 ..	873	878	878	858	868	885	874	**881**	869	864	862	881
17 ..	877	877	882	866	874	885	875	866	861	863	869	883
18 ..	870	871	884	862	874	882	881	866	855	872	871	884
19 ..	879	877	885	868	874	882	886	861	858	876	874	879
20 ..	879	874	887	872	877	888	876	868	863	884	873	883
21 ..	878	878	877	876	876	886	876	865	867	880	878	**887**
22 ..	867	**888**	867	871	883	887	875	868	871	**885**	862	883
23 ..	865	870	872	875	887	885	878	864	873	877	872	867
24 ..	866	875	879	878	**892**	876	879	863	**843**	883	872	872
25 ..	868	873	883	877	881	876	885	868	864	881	880	870
26 ..	872	**862**	881	883	880	876	876	871	870	880	880	872
27 ..	878	871	879	876	877	876	868	877	869	878	875	876
28 ..	870	871	884	879	878	875	877	873	874	875	876	882
29 ..	867	872	880	885	878	873	883	871	877	883	881	880
30 ..	872		877	**886**	881	875	873	876	878	878	881	879
31 ..	872		885		889		879	877		879		883
Monthly Mean	871·2	873·0	877·1	873·2	874·5	876·8	877·5	868·8	871·1	874·3	871·2	877·3

TABLE VIc—*Daily Means of Horizontal Force.*

1913.

36000γ +

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 ..	887	876	883	871	877	877	876	888	887	886	883	882
2 ..	886	882	885	874	886	865	878	**894**	874	892	**863**	880
3 ..	**856**	883	880	889	881	**864**	881	889	874	893	869	879
4 ..	864	**886**	870	886	877	871	886	891	878	895	878	872
5 ..	874	880	872	883	863	874	885	888	882	872	882	**864**
6 ..	879	881	875	**891**	862	881	889	885	880	**850**	877	875
7 ..	882	875	876	889	**861**	883	888	884	873	859	870	888
8 ..	885	880	886	891	868	888	886	887	862	861	873	878
9 ..	883	878	884	**845**	866	888	891	881	**858**	872	876	884
10 ..	865	876	887	847	870	889	884	877	864	867	885	882
11 ..	872	886	887	858	874	887	884	879	861	877	887	884
12 ..	883	874	889	860	878	892	887	879	875	884	889	888
13 ..	**889**	878	**891**	858	878	892	882	**872**	871	880	888	887
14 ..	884	858	871	862	883	**898**	875	877	873	888	887	885
15 ..	882	**856**	**857**	862	877	888	878	879	872	886	888	886
16 ..	878	859	865	866	875	888	883	876	876	883	**893**	888
17 ..	884	862	859	865	877	882	880	880	880	880	893	886
18 ..	874	867	871	867	888	889	882	876	**891**	882	893	**892**
19 ..	871	868	869	874	878	889	881	880	883	866	889	880
20 ..	870	871	874	877	879	886	**872**	888	882	870	886	883
21 ..	874	875	874	880	883	888	876	886	884	882	888	886
22 ..	876	878	872	878	889	885	879	894	868	886	889	885
23 ..	879	879	880	875	**896**	886	880	885	866	890	893	887
24 ..	881	883	878	879	890	892	881	880	884	890	888	890
25 ..	882	871	883	877	882	892	878	891	886	887	888	882
26 ..	882	875	883	881	885	889	883	894	891	890	887	875
27 ..	883	871	888	879	888	887	883	880	889	**899**	877	883
28 ..	886	877	881	867	885	892	**897**	878	881	898	879	885
29 ..	882		872	867	883	876	885	878	888	893	877	887
30 ..	870		869	870	889	875	887	886	884	889	880	887
31 ..	870		868		887		887	887		880		888
Monthly Mean.	877·8	874·5	876·7	872·3	879·2	884·4	882·7	883·5	877·2	881·5	883·2	883·2

* Owing to loss of curve this day is rejected.

TABLE VI*d*—*Daily Means of Horizontal Force.*

1914.

36000γ +

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	894	887	874	873	885	**864**	886	875	874	856	858	885
2	888	885	874	883	889	874	890	877	882	866	863	892
3	886	885	**873**	881	888	875	893	869	884	865	867	**897**
4	888	881	875	886	898	880	899	871	879	870	859	885
5	**876**	880	875	895	**900**	879	858	882	875	872	865	884
6	879	**860**	879	**833**	887	889	873	870	877	879	871	884
7	878	874	873	855	878	894	881	875	883	872	870	889
8	883	880	877	851	879	885	892	877	884	876	873	882
9	882	891	880	867	881	884	886	885	873	876	878	877
10	884	887	882	874	886	890	885	883	877	869	890	874
11	890	885	881	871	895	888	886	888	878	870	**849**	881
12	896	**893**	880	872	891	890	890	891	876	874	861	883
13	**900**	885	881	879	894	890	890	**893**	885	876	869	881
14	895	887	883	887	893	894	891	883	882	882	861	879
15	889	879	874	884	881	893	892	880	**890**	879	867	887
16	877	882	878	872	877	891	**901**	885	882	877	879	890
17	883	887	889	873	880	894	900	886	878	875	881	876
18	883	884	884	879	881	**895**	893	882	867	871	878	879
19	885	887	893	877	**876**	895	889	880	872	881	881	882
20	888	890	889	882	884	893	887	876	877	880	887	883
21	893	888	893	885	887	892	894	877	881	876	889	884
22	879	885	894	885	888	885	888	880	889	881	891	888
23	883	889	**896**	881	891	892	888	883	870	880	888	891
24	889	888	892	885	891	894	892	884	872	884	893	887
25	886	890	882	888	894	878	877	883	873	887	**897**	885
26	891	891	886	887	882	892	878	881	885	**903**	890	892
27	892	889	883	**896**	883	880	886	883	841	893	873	886
28	891	886	886	886	891	882	881	889	856	**839**	880	**872**
29	890		892	885	890	885	**850**	**865**	**839**	850	884	876
30	886		894	882	897	883	870	872	860	868	885	883
31	889		890		890		870	868		879		884
Monthly Mean.	886·9	884·8	883·3	877·8	887·3	886·7	885·0	879·8	874·7	874·4	875·9	883·8

TABLE VI*e*—*Daily Means of Horizontal Force.*

1915.

36000γ +

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	**852**	884	885	877	875	883	870	869	875	856	802	877
2	875	876	886	870	865	881	**851**	**850**	870	870	842	**886**
3	884	884	893	877	873	887	861	863	877	876	856	874
4	886	**892**	895	879	873	886	866	863	881	877	866	880
5	866	873	892	891	876	886	885	869	874	879	870	883
6	875	878	**900**	891	881	893	870	862	883	879	**791**	**819**
7	874	887	876	**893**	887	**902**	872	857	881	884	833	837
8	877	859	**852**	871	**891**	887	876	868	890	880	845	849
9	880	**853**	857	875	891	883	871	870	**892**	**885**	851	865
10	882	865	870	887	890	887	867	869	874	882	856	874
11	887	880	870	888	881	893	858	868	872	864	854	862
12	887	878	882	886	876	864	854	871	878	876	863	861
13	878	877	885	890	887	858	869	881	872	883	873	871
14	870	882	892	890	890	871	871	885	877	847	**878**	863
15	878	883	893	883	886	882	875	884	877	**789**	874	850
16	880	891	887	864	886	874	877	**900**	868	847	826	857
17	889	883	876	878	867	**723**	882	875	841	859	827	864
18	885	886	887	874	871	803	886	885	864	878	840	875
19	889	862	868	854	879	821	879	877	866	849	847	873
20	890	861	877	854	875	830	884	879	882	843	856	874
21	**894**	869	859	865	876	845	**891**	883	879	853	855	880
22	890	875	856	872	878	840	883	877	843	838	853	882
23	888	869	861	867	881	854	880	878	836	813	859	874
24	884	872	868	875	883	871	891	877	844	831	866	874
25	870	873	868	872	878	859	886	876	852	811	872	872
26	874	867	868	**837**	881	865	876	844	852	842	871	858
27	868	872	875	876	**864**	862	863	856	850	861	869	866
28	876	879	875	880	878	862	866	860	846	861	865	872
29	880		887	886	886	859	876	856	844	868	868	874
30	883		872	885	877	865	863	856	**834**	880	871	869
31	881		876		885		875	862		870		873
Monthly Mean.	879·7	875·4	877·0	876·2	879·6	862·5	873·4	870·0	865·8	859·1	853·3	867·4

TABLE VIIa—*Daily means of Declination (Easterly).*

1911.

0°+

1911.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	′	′	′	′	′	′	′	′	′	′	′	′
1 ..	56·2	55·9	**56·5**	55·2	55·3	**55·3**	54·8	54·1	54·1	53·7	53·3	53·3
2 ..	56·3	56·2	56·1	55·5	55·2	55·0	54·8	53·9	53·9	53·7	53·2	53·4
3 ..	**56·8**	56·1	56·4	55·4	55·1	55·0	54·7	53·9	**54·2**	**54·0**	53·4	53·2
4 ..	56·5	55·7	56·1	55·3	55·1	54·9	54·4	54·2	53·8	**53·4**	53·4	53·3
5 ..	56·6	55·8	56·5	55·2	55·2	55·2	54·4	53·9	54·0	53·7	**53·7**	53·2
6 ..	56·5	56·0	56·4	55·2	55·2	55·0	54·8	54·0	53·7	53·7	53·5	53·3
7 ..	56·5	55·8	56·2	**54·9**	55·3	55·1	54·9	54·0	53·9	53·9	**53·1**	53·4
8 ..	56·3	56·2	56·4	55·4	55·2	55·1	54·8	54·0	53·8	53·9	53·2	53·3
9 ..	56·5	56·1	56·1	**56·0**	55·5	55·0	**54·9**	53·8	53·9	53·9	53·3	53·2
10 ..	56·2	56·0	56·1	55·6	55·3	54·8	54·8	**53·6**	53·8	54·0	53·4	52·9
11 ..	56·2	55·9	56·0	55·6	55·4	55·3	54·6	54·1	53·9	54·0	53·4	**54·4**
12 ..	56·3	55·9	55·8	55·8	55·0	55·3	54·6	53·8	53·6	53·8	53·4	53·6
13 ..	56·2	55·9	55·6	55·7	**54·8**	55·0	54·3	53·9	53·9	53·8	53·7	53·5
14 ..	56·2	56·1	55·8	55·3	54·8	55·3	54·6	54·0	53·9	54·0	53·7	53·6
15 ..	56·0	**55·5**	55·8	55·4	55·2	55·3	54·5	54·0	53·8	54·0	53·4	53·5
16 ..	56·4	55·9	56·2	55·6	55·3	54·9	54·4	54·2	53·9	53·8	53·5	53·1
17 ..	**55·9**	55·9	55·9	55·4	55·1	54·8	**54·2**	53·9	53·7	53·9	53·4	53·2
18 ..	55·9	55·8	55·6	55·8	55·4	54·7	54·3	54·1	53·6	53·8	53·3	52·9
19 ..	56·3	55·9	55·6	55·7	54·9	54·9	54·4	54·2	53·6	54·0	53·3	53·0
20 ..	56·0	56·0	56·2	55·4	55·1	54·7	54·4	54·0	53·9	53·9	53·4	53·1
21 ..	56·0	**56·3**	56·3	55·4	55·5	54·5	54·6	54·2	54·1	53·8	53·3	53·1
22 ..	55·9	56·1	56·0	55·4	55·3	54·6	54·4	54·0	53·6	53·6	53·2	**52·8**
23 ..	55·9	56·3	56·3	55·4	55·2	54·9	54·5	54·3	53·9	53·6	53·2	53·3
24 ..	56·0	56·1	55·8	55·2	55·1	54·6	54·2	**54·4**	53·7	53·7	53·1	53·0
25 ..	56·2	56·1	56·1	55·4	55·1	54·5	54·6	54·2	53·6	53·5	53·1	53·1
26 ..	56·0	56·0	55·9	55·4	**55·6**	54·7	54·4	54·1	53·6	53·4	53·4	53·3
27 ..	56·1	56·3	55·7	54·9	55·3	**54·4**	54·5	54·2	53·5	53·5	53·5	53·2
28 ..	56·2	56·3	55·5	55·2	55·1	54·6	54·2	54·0	53·7	53·4	53·2	53·0
29 ..	56·1		55·8	55·1	55·4	54·7	54·4	54·2	53·5	53·4	53·2	52·9
30 ..	56·0		55·5	55·5	55·4	54·9	54·4	54·1	**53·4**	53·4	53·2	52·8
31 ..	56·4		**55·4**		55·5		54·3	54·4		53·6		53·0
Monthly Mean ..	56·21	56·00	55·99	55·41	55·22	54·90	54·52	54·05	53·76	53·74	53·35	53·22

In the derivation of the daily means of declination, the calculated values of the base line of the Declination Magnetograph have been used. As referred to in the foot-note to Table V*a* these values are derived by taking overlapping means of values derived from four successive observations with Instrument No. 7 and reducing them to the proper epoch; values for intermediate days being derived by simple interpolation. The daily mean ordinate derived from twenty-four hourly tabulations of the Declination Magnetograms and corrected for progressive change by $\frac{1}{48}$ the difference between the initial and the terminal hour (10*h* to 10*h*) were next converted into arc by factor 10′.28 which is equal to 1 c.m. of ordinate on the photographic paper. And finally these converted ordinates added to the daily base line values referred to above gave the absolute values of the daily means of Declination.

TABLE VIIb—*Daily means of Declination (Easterly).*

1912.

0°+

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	′	′	′	′	′	′	′	′	′	′	′	′
1 ..	52·6	52·6	52·3	52·0	51·7	51·3	**51·5**	51·1	50·3	**50·9**	49·7	49·7
2 ..	52·7	52·6	51·9	51·7	51·8	51·3	51·3	51·2	50·4	50·6	49·9	**49·9**
3 ..	52·8	**52·8**	52·1	52·0	51·8	51·2	50·9	51·0	50·2	50·3	49·8	49·3
4 ..	52·8	52·8	52·3	52·0	51·9	51·3	51·2	51·2	50·3	50·2	49·6	49·7
5 ..	52·7	52·4	52·1	52·4	51·9	**51·4**	51·1	51·1	50·2	50·2	49·7	49·5
6 ..	52·8	52·6	52·3	52·4	51·9	50·9	51·2	**51·7**	**50·1**	50·0	49·9	49·5
7 ..	52·7	52·6	**52·4**	52·2	51·9	51·1	51·2	51·3	50·2	50·3	50·1	49·6
8 ..	52·8	52·8	52·3	52·2	52·3	51·0	51·3	51·1	50·4	50·5	50·0	49·5
9 ..	**52·5**	52·6	52·3	52·2	52·2	51·4	50·9	51·3	50·1	50·5	50·0	49·7
10 ..	53·1	52·5	52·4	52·0	51·5	51·2	50·9	50·9	50·6	50·3	**50·5**	49·5
11 ..	52·9	52·6	51·9	51·8	51·9	51·0	50·7	50·9	50·4	50·2	50·3	49·5
12 ..	52·9	52·7	52·1	52·2	52·0	51·3	**50·6**	51·0	50·6	49·9	50·1	49·6
13 ..	53·2	52·6	52·3	52·1	**52·5**	51·2	50·8	50·5	**50·8**	50·2	49·7	49·2
14 ..	53·2	52·5	52·1	*	52·0	51·1	50·6	50·5	50·6	50·2	50·1	49·4
15 ..	**53·5**	52·7	52·2	52·4	52·2	51·0	51·2	50·8	50·8	50·3	50·0	49·5
16 ..	53·2	52·5	52·0	52·4	51·9	51·0	51·1	50·6	50·8	50·3	50·0	49·4
17 ..	52·9	52·5	52·2	**52·5**	51·7	51·0	50·9	50·8	50·7	50·4	50·0	49·2
18 ..	52·8	52·7	52·2	52·4	51·7	**50·7**	50·8	50·8	50·6	50·2	50·0	**48·9**
19 ..	52·8	52·5	**51·7**	52·3	51·5	51·0	50·9	51·1	50·5	50·2	49·6	49·1
20 ..	52·8	52·6	51·8	52·0	51·6	51·0	51·2	50·7	50·5	50·0	**49·4**	49·0
21 ..	52·8	52·4	52·1	52·1	51·3	51·2	51·2	50·7	50·4	50·1	49·4	49·2
22 ..	53·0	**52·2**	52·3	52·2	51·3	50·8	50·6	50·6	50·3	50·1	49·5	49·2
23 ..	53·0	52·4	52·2	52·2	51·1	50·9	51·2	50·4	50·3	49·9	49·7	49·6
24 ..	52·9	52·4	52·2	52·1	**51·0**	51·0	50·7	50·4	50·8	49·8	49·8	49·5
25 ..	52·9	52·4	52·0	52·1	51·3	50·8	50·6	50·6	50·3	**49·7**	49·4	49·4
26 ..	52·7	52·5	52·1	**51·6**	51·5	51·1	50·7	50·3	50·3	50·0	49·4	49·6
27 ..	52·9	52·6	51·9	52·1	51·5	51·2	50·9	50·1	50·3	49·9	49·7	49·5
28 ..	52·9	52·3	52·1	52·1	51·1	51·1	51·0	50·2	50·2	49·9	49·7	49·5
29 ..	52·9	52·2	52·2	51·8	51·5	51·3	50·8	50·2	50·1	50·2	49·4	49·7
30 ..	52·7		52·2	51·8	51·5	51·1	50·8	50·1	50·5	50·0	49·5	49·6
31 ..	52·8		52·1		51·0		51·0	**49·9**		49·9		49·4
Monthly Mean.	52·88	52·56	52·14	52·11	51·68	51·10	50·96	50·75	50·42	50·17	49·80	49·45

TABLE VIIc—*Daily means of Declination (Easterly).*

1913.

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1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	′	′	′	′	′	′	′	′	′	′	′	′
1 ..	49·3	48·6	48·4	48·7	48·1	47·9	**47·8**	47·2	46·8	46·5	46·5	45·9
2 ..	49·2	49·0	48·5	48·6	48·0	48·0	47·5	46·9	46·9	46·5	**46·8**	46·1
3 ..	**49·6**	49·0	**48·7**	48·6	48·0	48·1	47·7	47·0	46·9	**46·2**	46·7	45·8
4 ..	49·6	48·7	48·6	48·7	**48·7**	**48·2**	47·4	46·9	46·6	46·4	46·5	**46·7**
5 ..	49·2	48·5	48·7	48·8	48·7	47·9	47·7	47·0	46·5	46·4	46·5	46·5
6 ..	49·3	48·7	48·7	48·8	48·4	47·9	47·2	47·1	46·6	46·4	46·7	46·4
7 ..	49·4	48·7	48·4	48·6	48·3	47·8	47·4	47·1	46·8	46·8	46·6	46·2
8 ..	49·0	48·5	48·6	48·5	48·2	47·9	47·3	47·3	46·8	**46·9**	46·5	46·3
9 ..	49·0	48·7	48·4	**48·9**	48·3	48·0	47·2	47·1	46·5	46·6	46·4	46·2
10 ..	49·1	48·8	48·7	48·8	48·1	48·0	47·1	47·0	47·0	46·9	46·2	46·2
11 ..	49·0	48·5	**48·0**	48·7	48·4	48·1	47·1	47·1	46·9	46·8	46·3	46·1
12 ..	49·1	48·9	48·2	48·9	48·2	47·9	47·1	**47·4**	46·7	46·6	46·4	46·3
13 ..	48·9	48·7	48·3	48·7	48·2	47·9	47·0	47·1	46·5	46·8	46·0	46·3
14 ..	49·1	49·2	48·4	48·6	48·1	47·5	47·3	47·3	46·7	46·6	46·1	46·2
15 ..	49·5	49·1	48·3	48·5	47·9	48·1	47·2	47·1	**47·0**	46·6	46·3	46·0
16 ..	49·2	49·2	48·6	48·6	48·1	47·9	**46·8**	46·8	46·7	46·6	46·3	46·1
17 ..	49·2	49·0	48·5	48·3	48·1	47·9	47·0	46·9	46·7	46·6	46·1	45·9
18 ..	49·1	**49·3**	48·4	48·4	48·1	48·0	47·3	46·7	46·4	46·5	46·2	46·0
19 ..	49·1	49·1	48·7	48·5	48·4	48·0	47·4	**46·5**	46·3	46·5	46·4	46·0
20 ..	**48·8**	49·1	48·5	48·3	48·2	47·7	47·6	46·7	46·1	46·8	46·4	46·1
21 ..	48·9	48·8	48·6	48·3	48·1	47·7	47·3	46·7	46·1	46·5	46·2	45·9
22 ..	49·1	48·8	48·5	**48·2**	48·1	47·6	47·4	46·7	**45·8**	46·3	46·0	46·1
23 ..	49·0	48·9	48·3	48·8	47·9	47·2	47·5	47·1	46·3	46·3	**45·8**	46·0
24 ..	49·0	**48·4**	48·7	48·3	**47·8**	**47·1**	47·4	47·1	46·4	46·2	46·1	45·8
25 ..	49·1	48·8	48·5	48·3	47·9	47·4	47·2	46·9	46·4	46·6	45·8	45·8
26 ..	49·1	48·7	48·4	48·2	47·8	47·4	47·1	46·8	46·6	46·8	46·0	46·0
27 ..	48·8	48·7	48·2	48·4	47·8	48·0	47·2	47·0	46·4	46·6	45·9	46·0
28 ..	49·3	48·5	48·3	48·5	47·9	48·0	47·2	47·0	46·4	46·6	46·1	45·8
29 ..	48·9		48·5	48·4	47·9	48·0	47·4	47·1	46·2	46·7	46·2	**45·5**
30 ..	49·4		48·6	48·2	47·8	48·0	47·3	46·8	46·5	46·8	46·1	46·2
31 ..	49·3		48·7		48·0		47·2	46·9		46·7		45·7
Monthly Mean.	49·15	48·82	48·48	48·54	48·11	47·84	47·30	46·98	46·55	46·58	46·27	46·07

* Owing to loss of D curve this day is rejected.

TABLE VIId.—*Daily means of Declination (Easterly).*

1914.

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1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	′	′	′	′	′	′	′	′	′	′	′	′
1	**46·0**	45·6	45·2	**45·5**	44·4	**45·0**	43·8	44·0	43·9	**43·6**	43·2	42·7
2	45·8	45·4	45·4	45·1	44·5	45·0	44·0	44·0	43·6	43·5	43·2	42·8
3	45·7	45·5	45·3	45·2	44·4	45·0	44·0	44·2	43·8	43·5	42·9	42·6
4	45·8	45·7	45·5	45·1	44·5	44·8	43·8	**44·3**	43·9	43·5	43·1	42·9
5	45·9	45·6	45·4	44·8	44·6	44·6	44·1	44·1	43·8	43·1	42·9	42·9
6	45·9	**45·9**	45·5	45·3	44·9	44·5	44·3	44·0	43·3	43·3	42·6	42·7
7	46·0	45·8	45·5	45·2	44·8	44·4	43·8	43·8	43·4	43·1	42·8	42·7
8	46·0	45·8	45·4	45·3	44·9	44·5	44·0	43·6	43·3	43·3	42·8	42·8
9	45·9	45·4	45·2	45·2	44·7	44·6	44·5	43·8	43·6	43·3	42·8	**43·0**
10	45·8	45·5	45·3	45·1	44·7	44·1	44·5	43·8	43·3	43·2	**42·4**	43·0
11	45·6	45·4	45·4	45·3	44·5	44·4	44·0	43·6	43·5	43·4	43·2	42·7
12	45·6	45·3	45·2	45·3	44·9	44·2	44·0	43·5	43·4	42·9	42·9	42·8
13	45·7	45·7	45·3	45·0	44·8	44·2	44·1	43·7	43·1	43·2	42·8	42·9
14	45·9	45·7	45·1	45·0	44·9	44·4	44·3	43·7	43·2	43·0	**43·3**	42·9
15	46·0	45·7	45·3	45·1	45·1	44·5	44·2	43·9	43·2	42·9	42·7	42·5
16	45·9	45·6	45·2	**44·8**	45·0	44·3	43·9	43·8	43·2	43·2	42·6	42·3
17	45·8	45·4	45·1	45·1	**45·3**	44·3	44·0	43·9	43·3	43·2	42·7	42·7
18	45·9	45·6	45·3	44·8	45·1	44·2	43·9	43·8	43·4	42·9	42·8	42·6
19	45·8	45·4	45·1	45·1	45·0	44·7	44·2	43·8	43·3	42·8	42·9	42·8
20	45·6	45·3	45·4	45·1	44·9	44·3	44·4	43·8	43·4	42·8	42·7	42·8
21	45·6	45·5	45·0	45·0	44·8	44·5	44·1	44·0	43·1	42·9	42·8	42·8
22	45·9	45·4	45·3	45·0	44·8	44·6	44·2	43·9	43·2	42·9	42·5	42·6
23	45·6	45·2	45·2	45·1	45·1	44·3	44·4	43·6	43·5	43·0	42·6	42·8
24	45·5	45·2	45·0	44·9	45·0	**43·9**	44·2	43·7	43·3	43·5	42·5	42·5
25	45·3	45·3	45·0	44·9	45·1	44·3	44·3	43·5	**43·0**	43·1	42·7	42·6
26	45·5	45·2	**44·9**	45·4	44·9	44·3	44·1	43·5	43·2	**42·6**	42·7	42·4
27	**45·2**	45·3	45·3	45·3	44·7	44·4	**43·7**	43·6	**44·3**	42·9	42·9	42·5
28	45·6	**45·1**	**45·6**	45·1	**44·3**	44·3	44·2	**43·2**	43·3	43·3	42·8	42·6
29	45·5		45·1	45·3	44·8	44·2	**45·0**	43·8	43·7	43·2	42·9	42·6
30	45·7		45·1	45·3	44·4	44·3	44·3	43·7	43·5	42·8	42·8	**42·2**
31	45·4		45·1		44·6		44·4	44·1		42·9		42·7
Monthly Mean.	45·72	45·48	45·25	45·12	44·79	44·44	44·15	43·80	43·43	43·12	42·82	42·69

TABLE VIIe—*Daily means of Declination (Easterly).*

1915.

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1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	′	′	′	′	′	′	′	′	′	′	′	′
1	**43·0**	41·9	41·9	41·8	41·4	40·6	40·8	**39·9**	40·2	39·7	**40·1**	38·8
2	42·6	42·2	41·8	41·9	41·4	40·9	40·8	40·4	40·3	39·4	39·6	38·8
3	42·3	41·9	41·6	41·5	41·2	40·8	**40·9**	40·2	39·8	39·3	39·6	39·0
4	42·4	**41·6**	41·6	41·5	41·5	40·5	40·6	40·6	39·9	39·2	39·3	39·1
5	42·6	41·9	42·0	41·1	**41·9**	40·6	40·4	40·2	39·9	39·5	38·9	39·0
6	42·4	41·9	41·8	41·4	41·7	**40·4**	40·6	40·2	39·9	39·7	40·1	**40·0**
7	42·5	41·9	41·8	41·1	41·2	40·4	40·5	40·6	39·8	39·7	39·4	39·3
8	42·9	42·1	**42·1**	41·7	40·9	40·6	40·4	40·5	39·7	39·4	39·5	39·5
9	42·6	42·2	41·9	41·8	41·6	40·7	40·7	40·3	39·5	39·5	39·2	39·3
10	42·4	42·0	41·9	41·4	41·2	40·6	40·7	**40·7**	39·6	39·5	39·2	39·2
11	42·5	41·9	41·7	41·1	41·1	40·8	40·9	40·4	39·9	39·6	39·5	39·0
12	42·4	41·9	41·8	41·3	41·1	41·1	40·9	40·3	39·7	39·2	39·4	39·0
13	42·4	42·1	41·7	41·1	41·1	40·8	40·9	40·3	39·9	**39·1**	39·1	38·6
14	42·8	41·8	**41·3**	**41·0**	41·2	40·7	40·5	40·3	40·0	40·0	39·1	38·7
15	42·3	42·0	41·4	41·1	40·8	40·4	40·4	40·0	39·5	40·0	**38·9**	39·1
16	42·6	42·1	41·5	41·5	41·3	40·4	40·5	40·0	**39·4**	39·7	39·7	38·9
17	42·4	42·1	41·8	41·3	41·3	41·5	40·7	40·3	40·1	39·5	39·3	38·7
18	42·1	41·7	41·8	41·6	41·1	41·1	40·6	40·0	39·9	39·4	39·5	38·5
19	42·0	**42·3**	41·6	**42·1**	41·1	**41·6**	40·8	40·2	40·0	40·2	39·5	38·4
20	42·2	42·1	41·6	41·8	41·0	41·5	40·3	40·3	39·9	39·5	39·3	38·5
21	42·0	41·9	41·9	41·7	41·3	41·0	40·0	40·1	40·0	39·6	39·4	38·6
22	42·1	41·7	41·8	41·5	40·7	41·0	40·3	40·2	40·1	39·6	39·6	38·6
23	42·3	42·2	41·4	41·3	41·0	40·9	40·4	40·1	40·2	40·1	39·2	38·6
24	**41·7**	41·6	41·7	41·2	40·9	40·8	40·0	40·3	40·1	40·1	39·1	38·4
25	42·1	41·8	41·9	41·5	41·0	41·1	40·6	40·0	39·8	**40·5**	39·2	38·6
26	42·1	42·1	41·8	41·9	40·7	41·0	40·4	40·4	39·9	39·9	39·2	38·8
27	42·2	42·0	41·6	41·6	41·2	40·8	40·4	40·2	40·1	39·7	39·2	38·8
28	42·0	42·0	41·6	41·7	41·0	40·5	**39·7**	40·2	40·1	39·5	39·4	38·4
29	42·1		41·3	41·4	40·8	40·8	40·1	40·3	40·0	39·3	38·9	38·6
30	41·9		41·6	41·5	41·0	40·6	40·3	40·4	**40·4**	39·1	39·1	**38·2**
31	42·0		41·6		**40·6**		40·0	40·0		39·2		38·4
Monthly Mean.	42·32	41·96	41·70	41·48	41·14	40·82	40·49	40·25	39·92	39·60	39·35	38·82

TABLE VIII.—*Monthly means of the magnetic elements determined from the absolute observations of Horizontal Force, Declination and Inclination and reduced to the mean monthly tabulations of the magnetograms (derived from observations with Standard Instruments).*

Horizontal Force (Instrument No. 7.)

36000 γ +

Years.	January	February	March	April	May	June	July	August	September	October	November	December	Annual Means
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	845.9	840.2	848.1	848.7	852.7	861.6	861.0	862.6	860.7	859.5	863.9	862.7	855.6
1912 ..	873.4	874.3	877.7	870.4	872.9	877.4	879.1	868.6	868.9	875.4	872.7	876.9	874.0
1913 ..	878.4	874.8	877.8	872.3	878.9	886.5	880.3	883.6	875.7	882.2	886.6	885.8	880.2
1914 ..	889.2	886.5	883.2	877.3	887.2	885.1	883.9	878.1	872.5	875.5	874.2	884.1	881.4
1915 ..	880.6	873.1	876.0	876.6	883.7	863.2	872.1	867.0	867.5	860.8	854.2	867.1	870.2

Easterly Declination (Instrument No. 7.)

0°+

	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″
1911 ..	56 15	56 2	55 57	55 27	55 19	54 55	54 33	54 1	53 48	53 45	53 22	53 16	54 43
1912 ..	52 52	52 32	52 8	52 8	51 42	51 9	51 1	50 44	50 27	50 10	49 47	49 31	51 11
1913 ..	49 7	48 50	48 27	48 29	48 6	47 57	47 13	47 0	46 30	46 36	46 22	46 2	47 33
1914 ..	45 47	45 24	45 16	45 1	44 59	44 23	44 10	43 51	43 28	43 5	42 47	42 46	44 15
1915 ..	42 13	42 0	41 40	41 28	41 15	40 46	40 34	40 13	39 55	39 40	39 18	38 50	40 39

Vertical Force (Inductor No. 41.)

16000 γ +

γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	197.0	215.1	218.4	220.0	226.2	253.4	270.1	261.8	282.1	265.5	285.2	303.7	249.9
1912 ..	314.5	327.7	340.7	344.6	357.5	356.4	371.0	376.0	388.1	399.9	409.9	415.3	366.8
1913 ..	427.9	434.3	449.0	456.2	468.3	481.2	483.2	485.3	489.2	492.5	493.7	523.2	473.7
1914 ..	531.2	537.5	553.6	559.4	577.9	581.2	584.6	588.2	604.3	615.2	627.2	634.2	582.9
1915 ..	648.5	651.5	657.7	664.7	668.2	682.6	694.5	696.5	710.8	721.6	721.4	738.1	688.0

Inclination (Inductor No. 41.)

	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
1911 ..	23 43.8	23 45.4	23 45.4	23 45.5	23 45.8	23 47.6	23 49.0	23 48.3	23 49.9	23 48.7	23 50.1	23 51.5	23 47.6
1912 ..	52.0	53.0	53.9	54.5	55.4	55.1	56.2	57.0	57.9	58.6	59.5	59.7	56.1
1913 ..	24 0.7	24 1.3	24 2.3	24 3.1	24 3.8	24 4.5	24 4.9	24 5.0	24 5.5	24 5.5	24 5.5	24 7.8	24 4.2
1914 ..	8.3	8.9	10.3	11.0	12.0	12.3	12.6	13.1	14.6	15.3	16.1	16.5	12.6
1915 ..	17.7	18.2	18.6	19.1	19.1	21.0	21.6	21.9	23.0	24.1	24.3	25.1	21.1

Means in this table are derived from observations with the Observatory Standard instruments which are Instrument No. 7 for Horizontal Force and Declination and Inductor No. 41 by Schulze for Vertical Force and Inclination. These observations are printed in Tables I*a*, II*a*, and III*a* for each year.

Vertical Force and Inclination which during the years 1906 to 1910 were derived from observations with the Dip Circle are from the year 1911 derived from observations with the Inductor. To maintain the continuity between the past record and the present a correction of about 22γ (equivalent to 1·7′ of dip) is indicated, the Inductor result giving higher values of V and I.

Means in this table are derived by the usual method which consists in correcting the mean monthly observed absolute values by the difference between the mean ordinate at the time of the absolute determinations and the mean monthly ordinate derived from twenty-four hourly tabulations. The small differences noted between these means and those given at the foot of Tables VI and VII are due to the difference in the process adopted for the derivation of the latter (*vide* foot-note, Tables VI*a* and VII*a*).

TABLE VIII*a*.—*Monthly means of the magnetic elements determined from the absolute observations of Horizontal Force, Declination and Inclination and reduced to the mean monthly tabulations of the magnetograms (derived from supplementary observations with auxiliary instruments).*

Horizontal Force (Instrument No. 3.)

36000 γ +

Years.	January	February	March	April	May	June	July	August	September	October	November	December	Annual Means.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	842.3	837.0	842.6	846.4	850.2	861.4	863.5	865.1	859.7	859.2	864.5	860.5	854.4
1912 ..	868.7	869.8	874.7	873.1	874.1	877.1	880.0	877.1	878.2	881.8	875.8	884.3	876.3
1913 ..	885.0	880.8	881.6	880.1	884.8	891.4	890.2	888.9	886.9	889.2	884.1	887.0	885.8
1914 ..	892.3	887.2	890.4	884.0	894.6	893.7	893.8	886.5	884.2	883.5	883.6	890.5	888.7
1915 ..	885.6	882.2	887.6	882.0	885.1	872.1	883.8	881.5	873.5	867.7	861.6	875.2	878.2

Easterly Declination (Instrument No. 3.)

0°+

	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″
1911 ..	55 33	55 1	54 48	55 7	54 51	54 32	54 14	53 41	52 49	52 40	52 5	52 3	53 57
1912 ..	51 36	51 21	51 0	51 5	50 41	50 27	50 1	50 11	50 4	49 32	49 5	48 57	50 20
1913 ..	48 51	48 21	48 24	47 56	47 38	47 27	46 59	46 48	46 43	46 31	46 4	46 0	47 18
1914 ..	45 42	45 30	45 17	44 54	44 21	43 45	43 30	43 13	43 10	42 58	42 37	42 45	43 58
1915 ..	42 23	42 3	41 41	41 57	40 54	40 51	40 28	40 17	40 3	39 43	39 21	38 46	40 42

Vertical Force (Dip Circle.)

16000 γ +

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	167.7	185.0	204.4	207.8	203.5	221.0	244.5	244.8	251.7	257.4	271.0	281.2	228.3
1912 ..	298.3	307.0	307.4	324.0	339.2	344.0	341.9	374.0	396.0	400.1	406.1	409.3	353.9
1913 ..	406.4	407.6	438.5	437.8	465.5	471.2	461.3	472.9	477.9	480.7	501.3	499.7	460.1
1914 ..	547.6	544.9	532.7	553.0									

Vertical Force (Inductor No. 108.)

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1914 ..						598.5	613.1	611.8	614.5	637.3	629.6	641.8	
1915 ..	650.5	653.3	669.3	678.6	684.3	700.3	716.2	710.8	716.2	738.6	750.1	750.6	701.6

Inclination (Dip Circle.)

	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
1911 ..	23 41.5	23 43.0	23 44.3	23 44.5	23 44.1	23 45.1	23 47.0	23 46.9	23 47.5	23 48.0	23 48.9	23 49.8	23 45.9
1912 ..	50.7	51.4	51.3	52.8	53.9	54.2	53.9	56.8	58.5	58.6	59.2	59.3	55.0
1913 ..	59.0	59.2	24 1.5	24 1.6	24 3.6	24 3.7	24 3.2	24 4.0	24 4.6	24 4.6	24 6.1	24 6.0	24 3.1
1914 ..	24 9.6	24 9.5	8.6	10.4									

Inclination (Inductor No. 108.)

	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
1914 ..						24 13.7	24 14.8	24 14.9	24 15.3	24 17.0	24 16.2	24 17.1	
1915 ..	24 17.9	24 18.3	24 19.5	24 20.2	24 20.4	22.8	23.2	23.0	23.4	25.4	26.5	26.1	24 22.2

Means given in this table are derived in the same way as in Table VIII but from supplementary observations with auxiliary instruments which are Instrument No. 3 for Horizontal Force and Declination, Dip Circle No. 160 for Vertical Force and Inclination from January 1911 to May 1914, and Inductor No. 108 by Otto Toepfer for V and I from June 1914 to December 1915.

These supplementary observations are printed in Tables I*b*, II*b* and III*b* for each year from which it will be seen that results derived from the Dip Circle during the period June 1912 to May 1914 involve a large amount of the probable error of observations as during the period a single observation was taken every week giving only four observations from which the monthly mean can be derived.

For the differences between the results of the auxiliary and the standard instruments and their behaviour *vide* Introduction.

TABLE IXa.—*Showing the magnetic character of each day during the year 1911.*

1911.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	S	S	S	S	S	S	S	C	S	C	S	S
2 ..	S	S	S	S	S	C	S	C	C	S	C	C
3 ..	S	S	S	S	C	C	S	S	C	S	S	S
4 ..	S	S	S	S	C	S	S	S	C	S	S	C
5 ..	S	S	M	C	S	S	S	S	S	C	S	C
6 ..	S	S	S	C	S	S	S	S	S	C	C	S
7 ..	C	S	S	S	M	C	S	C	S	S	S	S
8 ..	S	S	S	S	S	C	S	C	C	S	S	C
9 ..	S	S	C	M	S	S	S	S	C	S	S	C
10 ..	S	S	C	S	S	S	S	C	S	S	S	S
11 ..	S	S	C	S	S	S	S	C	S	S	C	M
12 ..	C	C	C	S	S	S	S	C	S	S	S	S
13 ..	S	S	S	C	C	S	S	S	S	S	M	C
14 ..	S	S	S	C	S	S	C	C	C	S	S	S
15 ..	S	C	S	C	M	S	C	S	S	C	S	S
16 ..	S	S	S	M	S	S	C	S	S	S	S	C
17 ..	C	S	C	S	S	C	S	S	S	S	S	S
18 ..	S	S	C	S	S	C	S	C	S	S	C	S
19 ..	S	S	C	S	S	C	S	S	S	S	S	C
20 ..	S	C	G	S	S	S	S	S	M	S	S	C
21 ..	S	G	M	S	S	S	C	S	M	S	S	C
22 ..	S	M	S	S	S	S	C	C	S	S	C	C
23 ..	S	S	S	S	S	S	C	M	S	S	C	S
24 ..	M	S	S	S	S	S	S	M	S	S	C	C
25 ..	S	S	S	S	S	C	C	S	C	S	S	S
26 ..	S	S	S	C	S	C	C	S	C	S	S	S
27 ..	S	S	S	C	S	C	S	S	S	S	C	S
28 ..	S	S	S	S	C	S	S	S	C	C	C	C
29 ..	S		S	S	S	C	S	S	S	S	S	C
30 ..	S		S	M	S	C	S	S	C	C	C	S
31 ..	S		S		S		S	S		C		S
Total number of days in each class.												
Calm ..	3	3	7	7	4	12	8	10	10	7	10	14
Small ..	27	23	21	20	25	18	23	19	18	24	19	16
Moderate ..	1	1	2	3	2	0	0	2	2	0	1	1
Great ..	0	1	1	0	0	0	0	0	0	0	0	0
Very great ..	0	0	0	0	0	0	0	0	0	0	0	0
Sum ..	31	28	31	30	31	30	31	31	30	31	30	31
Selected Quiet days.												
	7	4	11	6	4	3	5	11	2	1	2	5
	12	12	12	13	10	8	14	12	8	6	11	9
	14	15	17	14	13	18	15	14	9	15	18	16
	17	18	18	15	23	19	16	18	28	28	23	20
	23	20	19	26	28	27	26	22	30	30	24	29
Mean ..	14·6	13·8	15·4	14·8	15·6	15·0	15·2	15·4	15·4	16·0	15·6	15·8

C=Calm, S=Small; M=Moderate; G=Great; V. G.=Very Great.
Disturbances are determined from the Horizontal Force traces.
Days are reckoned from local midnight to midnight.

TABLE IXb—*Showing the magnetic character of each day during the year 1912.*

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	S	C	S	S	C	S	S	S	S	S	S	S
2	C	C	C	C	S	S	C	S	C	C	S	S
3	S	S	C	C	S	S	S	C	C	S	C	S
4	C	C	C	S	S	C	S	C	S	S	S	C
5	S	C	S	S	M	C	S	S	S	C	S	C
6	C	C	S	S	S	C	S	M	S	S	S	S
7	C	C	S	S	S	C	S	S	C	S	S	S
8	S	C	S	C	S	S	S	C	S	S	S	S
9	S	C	S	C	C	S	C	C	S	C	S	S
10	C	S	S	S	S	S	C	C	S	S	M	C
11	S	S	S	C	S	S	C	S	S	S	S	S
12	S	S	S	C	S	S	C	C	S	S	C	C
13	S	S	C	C	S	C	C	C	S	S	C	S
14	S	C	S	S	S	S	S	S	S	M	M	S
15	C	C	S	M	S	C	C	S	C	S	S	S
16	C	S	C	S	C	C	S	S	C	S	S	C
17	S	S	C	S	C	S	S	S	M	S	S	C
18	S	S	C	S	C	C	S	S	S	C	S	S
19	S	C	C	S	C	C	S	M	S	C	S	S
20	S	C	C	C	C	C	S	S	C	S	C	C
21	C	C	C	C	C	C	C	S	C	S	C	C
22	S	C	S	C	C	S	C	S	S	S	S	S
23	S	S	C	S	C	S	C	S	S	S	S	S
24	S	S	C	C	S	S	C	S	M	S	C	S
25	C	S	C	S	S	C	S	S	S	S	C	S
26	C	S	C	C	C	C	S	C	C	C	S	S
27	C	S	C	C	C	S	S	S	S	C	S	C
28	S	C	S	C	C	S	C	S	C	S	C	C
29	C	C	S	C	S	S	C	S	C	S	C	S
30	S		C	S	C	S	C	C	S	S	C	S
31	C		C		S		S	C		C		S
Total number of days in each class.												
Calm	13	16	17	15	14	13	14	10	10	8	10	10
Small	18	13	14	14	16	17	17	19	18	22	18	21
Moderate	0	0	0	1	1	0	0	2	2	1	2	0
Great	0	0	0	0	0	0	0	0	0	0	0	0
Very Great	0	0	0	0	0	0	0	0	0	0	0	0
Sum	31	29	31	30	31	30	31	31	30	31	30	31
Selected Quiet days.												
	4	1	2	2	1	4	2	3	3	5	3	5
	7	9	13	9	9	7	12	4	7	9	12	12
	16	14	18	12	17	16	13	13	15	18	13	16
	21	20	20	21	23	20	24	26	16	19	21	21
	27	28	25	29	28	26	28	30	29	26	25	28
Mean	15·0	14·4	15·6	14·6	15·6	14·6	15·8	15·2	14·0	15·4	14·8	16·4

TABLE IXc—*Showing the magnetic character of each day during the year 1913.*

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	C	C	S	S	S	S	C	C	S	C	S	C
2	S	C	C	S	S	S	S	C	C	C	S	S
3	S	C	C	S	S	S	C	S	S	C	S	C
4	S	C	S	S	S	S	C	S	C	S	C	S
5	S	C	C	C	S	S	S	S	S	S	C	S
6	S	C	C	C	S	C	S	S	S	S	C	C
7	C	S	S	S	S	C	S	S	S	S	S	S
8	S	S	S	C	S	C	S	C	S	S	S	S
9	S	S	S	M	S	C	C	S	S	S	S	S
10	S	C	C	S	C	C	S	S	S	S	C	C
11	S	S	S	S	C	C	C	S	S	S	S	C
12	C	S	S	S	C	C	S	S	S	C	C	C
13	S	S	S	S	C	C	S	S	S	S	S	C
14	S	M	M	S	C	S	S	C	C	S	C	C
15	S	S	S	S	S	S	S	S	C	S	C	C
16	C	S	S	S	C	S	S	S	C	S	C	C
17	C	S	S	S	C	S	S	S	S	C	C	C
18	S	S	S	S	S	C	C	S	S	S	S	C
19	S	S	C	C	S	S	C	C	S	S	C	S
20	S	S	C	C	S	S	S	C	S	S	C	C
21	S	S	S	C	C	S	S	S	S	C	C	C
22	S	C	S	C	C	S	C	C	S	C	S	C
23	S	S	S	S	C	S	C	S	S	C	C	C
24	C	C	S	C	C	S	S	S	S	C	C	S
25	S	S	S	S	C	S	S	S	S	C	C	S
26	S	S	C	C	C	S	S	S	S	S	S	S
27	S	S	C	S	S	C	C	S	C	S	S	S
28	S	C	C	S	S	S	C	S	C	C	S	C
29	S		S	C	S	S	C	S	C	S	S	C
30	S		S	C	S	S	S	C	S	C	C	C
31	S		S		C		C	S		S		C
Total number of days in each class.												
Calm	6	10	10	11	14	10	13	8	8	12	16	20
Small	25	17	20	18	17	20	18	23	22	19	14	11
Moderate	0	1	1	1	0	0	0	0	0	0	0	0
Great	0	0	0	0	0	0	0	0	0	0	0	0
Very Great	0	0	0	0	0	0	0	0	0	0	0	0
Sum	31	28	31	30	31	30	31	31	30	31	30	31
Selected Quiet days.												
	7	3	2	6	10	7	3	2	2	2	5	1
	12	5	6	8	11	8	9	8	4	3	10	6
	16	10	10	19	14	12	18	14	14	22	16	17
	17	24	27	21	22	18	19	22	27	24	20	23
	24	28	28	26	23	27	27	30	29	30	23	31
Mean	15·2	14·0	14·6	16·0	16·0	14·4	15·2	15·2	15·2	16·2	14·8	15·6

C=Calm; S=Small; M=Moderate; G=Great; V. G.=Very Great. Disturbances are determined from Horizontal Force Traces. Days are reckoned from local midnight to midnight.

TABLE IXd—*Showing the magnetic character of each day during the year 1914.*

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	C	C	S	S	C	M	C	S	S	S	S	C
2	S	S	S	S	C	S	C	S	C	S	S	C
3	S	S	S	C	C	S	C	S	S	S	S	C
4	S	S	S	C	C	C	C	S	S	S	S	S
5	S	S	S	C	S	C	M	C	S	C	S	S
6	S	S	S	M	S	S	S	S	S	S	C	C
7	S	S	S	S	S	S	S	S	C	S	C	S
8	S	C	C	S	C	S	C	S	C	S	C	S
9	C	S	C	S	C	S	S	C	S	S	C	S
10	C	C	S	S	C	C	S	C	S	S	S	S
11	S	C	S	S	S	C	S	S	S	S	M	S
12	S	C	S	C	C	C	C	S	S	C	S	S
13	S	S	C	S	C	C	C	S	S	S	C	C
14	C	C	S	C	C	C	C	C	S	C	S	C
15	S	S	S	C	S	S	C	S	S	C	S	C
16	S	S	S	S	S	C	S	C	S	C	S	S
17	S	S	C	S	S	C	S	C	C	S	S	S
18	S	S	S	S	C	C	S	S	S	S	S	C
19	C	C	S	S	C	S	C	S	S	S	C	S
20	C	C	S	C	C	S	C	S	S	S	C	C
21	S	C	C	C	C	S	S	S	C	S	C	C
22	S	S	C	C	C	C	S	C	C	S	C	S
23	S	S	C	S	C	C	S	S	S	C	C	C
24	C	S	C	S	C	C	S	S	S	C	C	S
25	C	C	S	C	S	S	S	S	S	C	C	S
26	C	C	S	C	S	S	S	S	C	C	S	C
27	C	C	S	S	S	S	S	C	M	S	S	S
28	S	S	S	S	S	S	S	S	S	S	S	S
29	C		C	C	C	S	M	S	S	M	S	S
30	C		C	C	C	S	S	S	S	S	S	S
31	C		C		S		S	S		C		S
Total number of days in each class.												
Calm	13	12	11	13	19	13	11	8	7	10	12	12
Small	18	16	20	16	12	16	18	23	22	20	17	19
Moderate	0	0	0	1	0	1	2	0	1	1	1	0
Great	0	0	0	0	0	0	0	0	0	0	0	0
Very Great	0	0	0	0	0	0	0	0	0	0	0	0
Sum	31	28	31	30	31	30	31	31	30	31	30	31
Selected Quiet days.												
	1	1	8	4	4	5	8	5	2	5	6	3
	10	11	9	12	10	11	12	10	8	12	9	13
	19	12	13	14	14	14	15	14	17	15	13	15
	20	20	22	20	20	18	19	22	22	24	22	21
	27	27	29	26	30	24	20	27	26	25	25	26
Mean	15·4	14·2	16·2	15·2	15·6	14·4	14·8	15·6	15·0	16·2	15·0	15·6

TABLE IXe—*Showing the magnetic character of each day during the year 1915.*

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	S	C	C	S	S	C	C	S	C	S	M	C
2	C	S	C	S	S	C	S	S	C	C	S	C
3	C	C	C	S	S	C	S	S	C	S	S	C
4	S	C	C	S	S	C	C	S	C	C	C	C
5	S	S	C	C	S	C	C	C	S	C	S	C
6	S	S	S	S	S	C	S	S	C	C	G	M
7	S	C	S	S	C	C	C	S	C	S	S	S
8	S	S	S	M	C	S	S	S	C	S	S	S
9	S	S	S	S	C	S	S	S	C	C	C	C
10	C	S	S	C	C	C	S	S	S	S	S	S
11	C	C	S	S	C	C	S	S	S	S	S	S
12	C	S	C	C	S	S	S	S	S	C	S	S
13	S	S	C	C	S	S	C	C	S	C	C	C
14	S	C	C	S	S	S	C	C	C	M	C	S
15	C	S	C	S	S	C	C	C	C	M	S	S
16	C	C	C	S	S	S	C	C	S	S	M	S
17	C	C	S	S	S	G	C	S	S	S	S	S
18	S	C	S	S	S	M	C	S	C	S	M	C
19	C	S	S	S	C	C	C	S	S	M	S	C
20	S	S	S	S	S	C	C	S	C	M	S	S
21	S	S	S	S	S	S	C	S	S	S	S	C
22	S	S	S	S	S	S	S	S	S	S	S	C
23	C	S	S	S	S	S	C	S	M	M	S	S
24	C	S	S	C	C	C	C	C	S	S	C	S
25	S	S	S	C	S	S	S	S	S	S	C	S
26	S	S	S	M	C	S	S	S	S	S	S	S
27	S	C	S	S	S	S	S	S	S	S	S	S
28	S	C	S	C	S	C	S	S	S	C	S	S
29	C		C	C	C	S	S	S	S	C	C	C
30	S		S	C	C	C	S	S	S	S	C	C
31	C		S		S		S	S		S		C
Total number of days in each class.												
Calm	13	11	11	9	10	15	15	6	12	9	8	14
Small	18	17	20	19	21	13	16	25	17	17	18	16
Moderate	0	0	0	2	0	1	0	0	1	5	3	1
Great	0	0	0	0	0	1	0	0	0	0	1	0
Very Great	0	0	0	0	0	0	0	0	0	0	0	0
Sum	31	28	31	30	31	30	31	31	30	31	30	31
Selected Quiet days.												
	3	3	4	5	7	3	4	5	8	2	4	1
	11	7	13	10	9	7	13	14	14	6	9	5
	16	14	14	13	11	15	16	15	15	13	14	18
	19	16	15	24	24	24	20	16	18	28	24	22
	31	28	29	25	29	28	24	24	20	29	25	31
Mean	16·0	13·6	15·0	15·4	16·0	15·4	15·4	14·8	15·0	15·6	15·2	15·4

C=Calm; S=Small; M=Moderate; G=Great; V. G. =Very Great. Disturbances are determined from the Horizontal Force traces. Days are reckoned from local midnight to midnight.

TABLE IX*f*.—*Showing the magnetic character of each day and the difference of the daily mean of Horizontal Force from that of the preceding day (continuation of Table 381 in "Colaba Magnetic Data," 1846—1905).*

Unity = 1γ. **1911.**

1911. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Month.											
1	Ca +11	S − 2	S + 7	Ca + 4	C + 7	S + 4	S −18	C + 2	C + 7	C + 1	C − 5	Ca − 6
2	S − 4	Sa 0	Ca +13	Ca − 4	Ca − 1	Ca +12	S − 2	C +10	C + 2	Ca −14	C − 3	C 0
3	S − 9	Ca + 5	Sa −12	Ca + 3	C + 1	C + 9	Ca + 3	Ca − 5	C − 2	Ca 0	Ca −16	C + 2
4	S − 5	Ca +12	S +14	Ca − 2	C + 6	Sa + 1	Ca + 2	S − 2	C + 5	Ca + 7	Ca + 1	C + 4
5	S + 8	Sa − 5	Sa −10	C + 8	Ca + 1	S −18	C 0	Ca − 2	Ca − 5	C − 1	Ca − 5	C 0
6	S + 2	S − 2	S 0	Ca + 4	Ca − 7	S 0	Ca +11	Ca + 4	C + 3	C − 1	C +10	S − 7
7	Ca + 2	S + 3	Ca + 5	Ca − 2	M −46	C + 7	S −15	C + 3	C + 1	Ca − 7	C + 6	C − 8
8	S 0	S − 2	S − 9	M −11	Ca +25	C + 7	S − 2	Ca + 7	C − 2	C − 1	S + 3	C + 9
9	S − 8	Ca − 1	C + 7	Sa *	Ca +16	S + 5	Ca + 1	Ca + 6	Ca − 2	Ca − 3	S − 8	C + 7
10	S + 5	S 0	C + 8	S *	Ca + 8	S −14	S +10	C − 5	Ca − 6	S −11	Ca − 1	S + 4
11	Ca − 3	Ca + 1	C + 6	C + 9	Ca + 1	S −10	Ca − 4	C 0	S − 2	Ca − 7	Ca + 5	M −87
12	C + 7	Ca +12	C − 3	Ca + 5	C 0	Ca + 4	Ca − 1	Ca + 5	Ca − 3	C +18	S 0	C +43
13	S − 9	S − 9	Ca +13	C + 7	C + 7	S + 2	C + 9	Ca − 8	Ca − 2	Ca + 8	Sa −23	C +15
14	Ca + 8	Sa −10	Ca −18	C + 2	Sa −12	Ca 0	C − 1	C − 7	C +11	C − 3	Sa + 1	Ca + 6
15	Ca + 7	Ca + 9	Ca + 5	Ca + 9	S −29	Ca + 8	C + 5	C + 3	Ca + 3	C + 3	S + 7	C +10
16	S −11	S − 1	Ca − 2	Sa −15	Ca +10	Ca − 1	C + 6	Ca − 8	S −20	Ca − 1	Ca + 7	C + 2
17	Ca +10	S + 3	C + 1	S −18	Ca + 4	C − 1	S − 5	Ca + 7	Ca + 9	S −20	Ca − 1	S − 3
18	S 0	Ca − 4	C + 2	S + 7	Ca + 9	C + 9	S −11	C 0	C + 7	S + 5	C +10	C − 1
19	Ca − 7	Ca + 3	S + 6	Ca + 4	Ca +10	C + 4	S − 6	S − 1	S + 8	Ca + 2	Ca + 6	C + 5
20	Ca + 6	Ca + 3	Ma −49	Ca + 8	S − 6	Ca 0	S + 7	Ca − 3	Sa −38	S + 5	Ca − 8	C + 4
21	C + 3	Ma −28	Sa +10	S − 2	S − 2	S − 3	Ca + 2	C + 1	Sa + 1	Ca + 5	Ca + 1	Ca − 1
22	Ca − 7	M − 1	S + 8	S − 2	Ca + 6	Ca − 6	C − 7	C +13	S + 9	Ca + 5	C + 5	C + 2
23	S + 7	Sa + 5	Sa + 3	Ca 0	Ca +12	Ca 0	C + 8	Sa −34	Ca + 9	C + 7	Ca + 5	C 0
24	M −17	S + 3	S + 4	S − 2	Ca − 5	C + 2	S + 6	S − 6	C + 4	Ca − 1	C + 1	C + 7
25	Sa −11	S + 7	Sa − 3	Ca +12	Ca 0	C + 3	C − 6	S +12	C + 3	S − 4	Ca + 9	Ca − 6
26	S + 6	S − 4	Sa + 1	C + 5	C − 3	C + 2	C + 3	S + 4	Ca + 5	C 0	C −10	S −15
27	Ca + 3	S + 6	Sa − 8	Ca +10	Ca − 4	C + 8	S +15	Ca − 6	C − 3	Ca +12	C − 4	Ca + 3
28	S 0	Sa − 7	S + 5	S − 8	C + 5	Ca − 3	Sa −27	Ca + 7	Ca +10	C − 5	C − 2	C − 1
29	Ca + 5		S + 5	Ca 0	Ca +11	C − 8	S − 6	C + 3	C + 1	Ca + 6	C − 1	C + 8
30	S − 6		Ca + 7	Sa −12	Sa −14	Ca + 9	S + 4	C + 1	C − 1	C − 4	C + 3	Ca + 6
31	Sa 0		Ca + 2		S −15		C + 3	Ca 0		C + 6		Ca −12
Sum without regard to sign.	187	148	246	175	283	160	206	175	184	173	167	284
	Total number of days in each class.											
C	2	0	6	5	7	11	10	12	14	12	12	19
Ca	11	9	8	14	17	10	7	13	10	14	12	7
S	15	12	9	7	4	8	13	5	4	5	4	4
Sa	2	5	7	3	2	1	1	1	2	..	2	..
M	1	1	..	1	1	..	..	..	..	..	..	1
Ma	..	1	1	..	..	..	..	..	..	..	..	..
G	..	..	..	..	..	..	..	..	..	..	..	..
V.G.	..	..	..	..	..	..	..	..	..	..	..	..
Sum	31	28	31	30	31	30	31	31	30	31	30	31

C = Calm; S = Small; M = Moderate; G = Great; V.G. = Very Great. The suffix *a* denotes intermediate conditions of activity.
The character of the disturbances is determined from the Horizontal Force Traces. Days are reckoned from 10 a.m. to 10 a.m. of the following day.
* Owing to loss of curve on the 9th April these differences are not available.

TABLE IX*g*.—*Showing the magnetic character of each day and the difference of the daily mean of Horizontal Force from that of the preceding day. (Continuation of Table 381 in "Colaba magnetic data," 1846—1905).*

Unity = 1γ. **1912.**

1912.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	Ca + 5	C + 2	C 0	C − 1	C − 6	S −18	C + 3	Ca *	C + 3	Sa −41	Ca − 8	S + 4
2	C + 4	Ca 0	C + 8	C − 2	Ca − 7	S + 2	C + 3	Ca *	C + 5	C +33	Ca − 3	S −19
3	C + 5	Ca − 4	C + 4	C − 8	Ca − 1	Ca − 4	S +10	C − 2	S + 3	Ca + 7	C + 9	S +11
4	C + 2	C + 2	C − 8	C +10	S + 8	C + 3	Sa −25	C + 3	Ca −17	C + 1	C 0	C − 1
5	Ca − 5	C + 8	S + 4	S −13	M −17	C 0	Sa − 3	S + 2	S + 1	C + 4	S − 2	Ca + 5
6	C + 3	C + 1	Ca − 4	Ca −16	S + 3	C + 9	S + 7	Sa −40	Ca − 2	C − 1	Ca − 4	S − 3
7	Ca + 8	C − 5	Ca − 3	Ca + 8	S + 4	S + 7	Ca + 1	S +26	C + 7	Ca + 3	Ca − 5	Sa −11
8	C − 5	C − 4	S −11	C + 6	S − 5	S −22	C + 3	C + 8	S + 6	C − 4	Ca + 8	Ca + 1
9	Ca − 1	C + 2	S + 2	Ca +13	C + 8	S + 1	C − 2	C + 4	S − 9	C − 2	S +12	Ca + 4
10	C − 5	Ca − 7	Ca − 8	S −17	Ca + 6	S + 5	C + 6	Ca + 4	Ca − 3	Ca − 2	Sa −30	C − 1
11	Ca − 8	Ca + 2	C +16	Ca +10	S + 3	Ca − 1	C + 2	C − 5	Ca + 5	Sa − 8	S + 1	Ca + 4
12	S −13	Ca − 3	Ca − 3	C + 5	S − 22	C + 3	C + 3	C + 2	Ca − 7	S + 4	C +12	C + 2
13	S + 6	Ca − 1	C + 8	C − 9	Sa − 4	C 0	C + 1	C + 9	C + 2	S − 1	S +14	S + 8
14	C + 3	C + 5	S +12	S +13	S + 4	C − 3	Ca + 4	Ca − 5	C + 6	Sa −17	M −47	S − 7
15	C + 3	C − 1	C − 8	Sa −40	Ca + 3	C + 5	C − 7	G + 2	C 0	S + 2	S +28	C 0
16	C + 9	Ca + 9	C − 3	Sa +14	C + 5	C + 9	Ca − 7	Ca + 4	C − 8	S + 8	S − 2	C + 3
17	Ca + 4	Ca − 1	C + 4	S + 8	C + 6	Ca 0	Ca + 1	S −15	Sa − 8	Ca − 1	S + 7	Ca + 2
18	Ca − 7	C − 6	C + 2	Ca − 4	C 0	C − 3	C + 6	Sa 0	S − 6	C + 9	Ca + 2	Ca + 1
19	Ca + 9	C + 6	C + 1	Ca + 6	Ca 0	C 0	Ca + 5	S − 5	Ca + 3	C + 4	Ca + 3	C − 5
20	Ca 0	C − 3	C + 2	C + 4	C + 3	C + 6	Ca −10	C + 7	C + 5	S + 8	C − 1	C + 4
21	C − 1	C + 4	Ca −10	C + 4	C − 1	C − 2	C 0	S − 3	C + 4	Ca − 4	C + 5	C + 4
22	S −11	Ca +10	C −10	C − 5	C + 7	C + 1	C − 1	S + 3	S + 4	Ca + 5	S −16	Sa − 4
23	C − 2	Ca −18	C + 5	C + 4	C + 4	Ca − 2	C + 3	S − 4	S + 2	Ca − 8	Ca +10	Sa −16
24	Ca + 1	Ca + 5	C + 7	C + 3	S + 5	C − 9	C + 1	Ca − 1	Sa −30	Ca + 6	C 0	S + 5
25	C + 2	Ca − 2	C + 4	Ca − 1	C −11	C 0	Ca + 6	Ca + 5	C +21	Ca − 2	Ca + 8	Ca − 2
26	C + 4	S −11	Ca − 2	Ca + 6	C − 1	C 0	Ca − 9	C + 3	Ca + 6	C − 1	S 0	C + 2
27	C + 6	C + 9	C − 2	C − 7	C − 3	Ca 0	C − 8	S + 6	C − 1	C − 2	Ca − 5	C + 4
28	Ca − 8	Ca 0	S + 5	C + 3	C + 1	Ca − 1	C + 9	S − 4	C + 5	Ca − 3	C + 1	C + 6
29	C − 3	C + 1	S − 4	C + 6	Ca 0	Ca − 2	C + 6	Ca − 2	C + 3	Ca + 8	C + 5	Ca − 2
30	C + 5		C − 3	Ca + 1	Ca + 3	C + 2	C −10	C + 5	S + 1	C − 5	C 0	C − 1
31	C 0		C + 8		S + 8		S + 6	C + 1		C + 1		Ca + 4
Sum without regard to sign ..	148	132	171	247	159	120	168	180	183	205	248	146
Total number of days in each class.												
C	17	15	19	15	13	17	18	12	13	12	9	12
Ca	11	13	6	9	7	7	8	8	7	11	10	9
S	3	1	6	4	9	6	3	9	8	5	9	7
Sa	..	..	..	2	1	..	2	2	2	3	1	3
M	..	..	..	..	1	..	..	..	..	..	1	..
Ma	..	..	..	..	..	..	..	..	..	..	..	..
G	..	..	..	..	..	..	..	..	..	..	..	..
V.G.	..	..	..	..	..	..	..	..	..	..	..	..
Sum ..	31	29	31	30	31	30	31	31	30	31	30	31

C = Calm ; S = Small ; M = Moderate ; G = Great; V G = Very Great. The suffix *a* denotes intermediate conditions of activity.
The character of the disturbances is determined from the Horizontal Force Traces. Days are reckoned from 10 a.m. to 10 a.m. of the following day.
* Owing to loss of curve on the 1st August these differences are not available.

TABLE IXh.—*Showing the magnetic character of each day and the difference of the daily mean of Horizontal Force from that of the preceding day (continuation of Table 381 in "Colaba Magnetic Data," 1846—1905).*

Unity = 1γ. **1913.**

1913.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	C + 4	C + 6	C + 6	S + 3	Ca + 7	S −10	Ca + 1	C + 1	Ca 0	C + 2	Ca + 3	C + 2
2	S − 1	C + 6	C + 2	C + 3	Ca + 9	S −12	C + 2	Ca + 6	Ca −13	C + 6	S −20	Ca − 2
3	Sa −30	C + 1	C − 5	Ca +15	Ca − 5	S − 1	C + 3	C − 5	C 0	C + 1	S + 6	C − 1
4	S + 8	C + 3	C −10	Ca − 3	Sa − 4	S + 7	C + 5	S + 2	C + 4	S + 2	C + 9	S − 7
5	S +10	C − 6	C + 2	C − 3	S −14	C + 3	C − 1	Ca − 3	C + 4	S −23	C + 4	Ca − 8
6	Ca + 5	C + 1	Ca + 3	C + 8	S − 1	C + 7	C + 4	C − 3	S − 2	Sa −22	S − 5	C +11
7	C + 3	Ca − 6	Ca + 1	C − 2	S − 1	C + 2	Ca − 1	Ca − 1	S − 7	S + 9	S − 7	Ca +13
8	S + 3	Ca + 5	S +10	S + 2	Ca + 7	C + 5	C − 2	C + 3	Sa −11	S + 2	Ca + 3	C −10
9	S − 2	Ca − 2	Ca − 2	M −46	C − 2	C 0	C + 5	S − 6	Sa − 4	S +11	Ca + 3	Ca + 6
10	S −18	C − 2	C + 3	S + 2	C + 4	C + 1	Ca − 7	Ca − 4	S + 6	S − 5	C + 9	C − 2
11	C + 7	Ca +10	S 0	S +11	C + 4	C − 2	C 0	S + 2	S − 3	Ca +10	Ca + 2	C + 2
12	C +11	S −12	Ca + 2	S + 2	C + 4	C + 5	S + 3	Ca 0	S +14	S + 7	Ca + 2	C + 4
13	Ca + 6	S + 4	S + 2	Ca − 2	C 0	Ca 0	S − 5	C − 7	S − 4	Ca − 4	C − 1	C − 1
14	Ca − 5	Sa −20	Sa −20	Ca + 4	C + 5	Ca + 6	Ca − 7	C + 5	Ca + 2	Ca + 8	C − 1	C − 2
15	Ca − 2	S − 2	S −14	S 0	Ca − 6	C −10	Ca + 3	Ca + 2	C − 1	Ca − 2	C + 1	C + 1
16	C − 4	S + 3	S + 8	S + 4	C − 2	Ca 0	C + 5	Ca − 3	C + 4	Ca − 3	C + 5	C + 2
17	Ca + 6	S + 3	S − 6	S − 1	C + 2	C − 6	C − 3	C + 4	S + 4	C − 3	C 0	C − 2
18	S −10	Ca + 5	Ca +12	C + 2	S +11	C + 7	C + 2	Ca − 4	S +11	S + 2	C 0	C + 6
19	S − 3	S + 1	C − 2	Ca + 7	Ca −10	Ca 0	C − 1	C + 4	Ca − 8	Ca −16	C − 4	S −12
20	S − 1	S + 3	C + 5	C + 3	C + 1	C − 3	S − 9	Ca + 8	C − 1	S + 4	C − 3	C + 3
21	C + 4	Ca + 4	S 0	C + 3	C + 4	Ca + 2	C + 4	C − 2	Ca + 2	C +12	C + 2	C + 3
22	Ca + 2	Ca + 3	C − 2	C − 2	C + 6	C − 3	C + 3	C + 8	S −16	Ca + 4	Ca + 1	C − 1
23	C + 3	C + 1	S + 8	Ca − 3	C + 7	S + 1	C + 1	S − 9	S − 2	C + 4	C + 4	C + 2
24	Ca + 2	S + 4	Ca − 2	C + 4	C − 6	Ca + 6	Ca + 1	C − 5	Ca +18	C 0	C − 5	C + 3
25	Ca + 1	Sa −12	Ca + 5	C − 2	C − 8	Ca 0	S − 3	Ca +11	Ca + 2	C − 3	C 0	S − 8
26	Ca 0	Sa + 4	C 0	C + 4	C + 3	Ca − 3	Ca + 5	Ca + 3	Ca + 5	C + 3	Ca − 1	S − 7
27	Ca + 1	Ca − 4	C + 5	S − 2	Ca + 3	C − 2	C 0	Ca −14	C − 2	Ca + 9	Ca −10	S + 8
28	S + 3	C + 6	C − 7	C −12	Ca − 3	S + 5	C +14	Ca − 2	C − 8	C − 1	S + 2	C + 2
29	Ca − 4		S − 9	C 0	Ca − 2	Ca −16	C −12	C 0	C + 7	C − 5	Ca − 2	C + 2
30	S −12		S − 3	C + 3	C + 6	Ca − 1	C + 2	C + 8	Ca − 4	Ca − 4	C + 3	C 0
31	Ca 0		S − 1		C − 2		C 0	C + 1		Ca − 9		C + 1
Sum without regard to sign ..	171	139	157	158	149	126	114	136	169	196	118	134
Total number of days in each class.												
C	7	9	12	14	17	14	20	14	9	11	16	22
Ca	12	8	7	6	9	10	7	13	9	10	9	4
S	11	8	11	9	4	6	4	4	10	9	5	5
Sa	1	3	1	..	1	..	..	..	2	1	..	..
M	..	..	..	1	..	..	..	..	..	..	..	..
Ma	..	..	..	..	..	..	..	..	..	..	..	..
G	..	..	..	..	..	..	..	..	..	..	..	..
V. G.	..	..	..	..	..	..	..	..	..	..	..	..
Sum ..	31	28	31	30	31	30	31	31	30	31	30	31

C = Calm; S = Small; M = Moderate; G = Great; V G = Very Great.
The character of the disturbances is determined from the Horizontal Force Traces.

The suffix *a* denotes intermediate conditions of activity.
Days are reckoned from 10 a.m. to 10 a.m. of the following day.

TABLE IX*i*.—*Showing the magnetic character of each day and the difference of the daily mean of Horizontal Force from that of the preceding day (continuation of Table 381 in "Colaba Magnetic Data," 1846—1905).*

Unity=1γ, **1914.**

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November	December.
	Month.											
1	C + 6	C − 2	S −12	S −17	C + 3	S −26	C + 3	S + 5	Ca + 6	S − 4	Sa −21	C 0
2	Ca − 6	Ca − 2	S 0	S +10	C + 4	S +10	C + 4	S + 2	Ca + 8	S +10	Ca + 5	C + 7
3	Ca − 2	S 0	C −1	Ca − 2	C − 1	Ca + 1	C + 3	Sa − 8	S + 2	S − 1	Sa + 4	Ca + 5
4	S + 2	Ca − 4	S + 2	C + 5	C +10	C + 5	S + 6	S + 2	S − 5	Ca + 5	Sa − 8	Ca −12
5	S −12	Ca − 1	C 0	Ca + 9	Ca + 2	C − 1	M −41	Ca +11	S − 4	Ca + 2	S + 6	Ca − 1
6	Ca + 3	S −20	Sa + 4	M −62	Ca −13	C +10	S +15	S −12	Ca + 2	S + 7	Ca + 6	Ca 0
7	S − 1	Ca +14	Ca − 6	S +22	C − 9	Ca + 5	Ca + 8	S + 5	C + 6	S −7	Ca − 1	S + 5
8	Ca + 5	C + 6	C + 4	S − 4	C + 1	S − 9	C +11	Ca + 2	Ca + 1	S + 4	C + 3	S − 7
9	C − 1	Ca +11	C + 3	Ca +16	C + 2	C − 1	Ca − 6	C + 8	S −11	S 0	C + 5	S − 5
10	C + 2	C − 4	Ca +2	Ca + 7	C + 5	C + 6	S − 1	C − 2	S + 4	Ca − 7	S +12	Ca − 3
11	Ca + 6	C − 2	Ca − 1	Ca − 3	Ca + 9	C − 2	C + 1	S + 5	Ca + 1	Ca + 1	Sa −41	C + 7
12	S + 6	C + 8	S − 1	C + 1	C − 4	C + 2	C + 4	Ca + 3	S − 2	Ca + 4	S +12	Ca + 2
13	S + 4	Ca − 8	C + 1	Ca + 7	C + 3	C 0	C 0	Ca + 2	C + 9	S + 2	Ca + 8	C − 2
14	Ca − 5	Ca + 2	Ca + 2	C + 8	C − 1	C + 4	C + 1	C −10	C − 3	C + 6	S − 8	C − 2
15	Ca − 6	Ca − 8	S − 9	Ca − 3	S −12	Ca − 1	Ca + 1	Ca − 3	Ca + 8	C − 3	S + 6	C + 8
16	Ca −12	C + 3	C + 4	S −12	Ca − 4	C − 2	Ca + 9	C + 5	S − 8	C − 2	S +12	S + 3
17	Ca + 6	Ca + 5	S + 11	Ca + 1	S + 3	C + 3	C − 1	Ca + 1	Ca − 4	S − 2	S + 2	S −14
18	C 0	Ca − 3	Ca − 5	S + 6	C + 1	C + 1	Ca − 7	Ca − 4	Ca −11	Ca − 4	Ca − 3	Ca + 3
19	C + 2	C + 3	Ca + 9	C − 2	C − 5	S 0	C − 4	S − 2	Ca + 5	Ca +10	Ca + 3	S + 3
20	C + 3	C + 3	Ca − 4	C + 5	C + 8	S − 2	C − 2	S − 4	C + 5	Ca − 1	C + 6	C + 1
21	Ca + 5	C − 2	C + 4	C + 3	C + 3	C − 1	Ca + 7	C + 1	C + 4	Ca − 4	C + 2	C + 1
22	S − 14	S − 3	C + 1	C 0	C + 1	C − 7	Ca − 6	C + 3	S + 8	S + 5	C + 2	S + 4
23	C + 4	Ca + 4	Ca + 2	C − 4	C + 3	C + 7	S 0	S + 3	S −19	C − 1	C − 3	C + 3
24	C + 6	Ca − 1	S − 4	S + 4	C 0	C + 2	S + 4	S + 1	Ca + 2	C + 4	C + 5	S − 4
25	C − 3	C + 2	Ca −10	C + 3	S + 3	Sa −16	S −15	Ca − 1	Ca + 1	C + 3	C + 4	C − 2
26	C + 5	C + 1	Ca + 4	C − 1	S −12	S +14	S + 1	Ca − 2	Ca +12	S +16	Sa − 7	C + 7
27	C + 1	C − 2	C − 3	S + 9	C + 1	S −12	Ca + 8	C + 2	M −44	Sa −10	S −17	S − 6
28	Ca − 1	S − 3	C + 3	C −10	Ca + 8	S + 2	S − 5	S + 6	S +15	Sa −54	Ca + 7	Sa −14
29	C − 1		C + 6	C − 1	C − 1	S + 3	M −31	S −24	S −17	Sa +11	S + 4	C + 4
30	C − 4		C + 2	C − 3	C + 7	S − 2	Sa +20	S + 7	S +21	S +18	Ca + 1	S + 7
31	C + 3		C − 4		Sa − 7		S 0	S − 4		Ca +11		S + 1
Sum without regard to sign.	137	127	124	240	146	157	225	150	248	219	224	143
	Total number of days in each class.											
C	14	12	13	13	21	16	11	7	5	6	8	12
Ca	11	12	10	8	5	3	8	9	12	10	8	7
S	6	4	7	8	4	10	9	14	12	12	9	11
Sa	..	..	1	..	1	1	1	1	..	3	5	1
M	..	..	..	1	..	..	2	..	1	..	..	..
Ma	..	..	..	..	..	..	..	..	..	..	..	..
G	..	..	..	..	..	..	..	..	..	..	..	..
V. G.	..	..	..	..	..	..	..	..	..	..	..	..
Sum	31	28	31	30	31	30	31	31	30	31	30	31

C=Calm S=Small; M=Moderate; G=Great; V G=Very Great.
The character of the disturbances is determined from the Horizontal Force traces.

The suffix *a* denotes intermediate conditions of activity.
Days are reckoned from 10 a.m. to 10 a.m. of the following day.

TABLE IXj.—*Showing the magnetic character of each day and the difference of the daily mean of Horizontal Force from that of the preceding day (continuation of Table 381 in "Colaba Magnetic Data," 1846—1905).*

Unity=1γ. **1915.**

1915.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	Sa −32	S + 3	C + 6	Ca + 1	S −10	C − 2	S + 5	S − 6	C +13	S +22	M −68	C + 6
2	C +23	S − 8	C + 1	S − 7	S −10	C − 2	S −19	Sa −19	C − 5	C +14	S +40	Ca + 9
3	S + 9	Ca + 8	C + 7	S + 7	S + 8	C + 6	S +10	Ca +13	C + 7	Ca + 6	S +14	C −12
4	S + 2	Ca + 8	Ca + 2	Ca + 2	S 0	C − 1	C + 5	S 0	C + 4	C + 1	C +10	C + 6
5	Sa −20	Ca −19	C − 3	Ca +12	S + 3	C 0	S +19	C + 6	S − 7	C + 2	M + 4	Ca + 3
6	Ca + 9	S + 5	S + 8	S 0	Ca + 5	C + 7	S −15	S − 7	C + 9	C 0	Ma −79	Ma −64
7	S − 1	C + 9	S −24	S + 2	C + 6	S + 9	Ca + 2	S − 5	C − 2	C + 5	S +42	S +18
8	S + 3	Sa −28	Sa −24	Sa −22	C + 4	S −15	S + 4	S +11	C + 9	C − 4	S +12	Ca +12
9	Ca + 3	S − 6	S + 5	S + 4	C 0	Ca − 4	S − 5	C + 2	S + 2	C + 5	Ca + 6	S +16
10	C + 2	C +12	S +13	C +12	C − 1	C + 4	S − 4	S − 1	Ca −18	S − 3	Sa + 5	Ca + 9
11	C + 5	Ca +15	S 0	Ca + 1	C − 9	S + 6	S − 9	Ca − 1	Ca − 2	Ca −18	S − 2	S −12
12	S 0	S − 2	Ca +12	Ca − 2	Ca − 5	Sa −29	S − 4	C + 3	C + 6	C +12	S + 9	C − 1
13	S − 9	Ca − 1	C + 3	C + 4	Ca + 11	Sa − 6	C +15	C +10	Ca − 6	C + 7	C +10	Ca +10
14	S − 8	C + 5	C + 7	Ca 0	S + 3	S +13	C + 2	C + 4	C + 5	Sa −36	C + 5	S − 8
15	C + 8	S + 1	Ca + 1	S − 7	Ca − 4	C +11	C + 4	C − 1	C 0	Sa −58	S − 4	Sa −13
16	C + 2	C + 8	S − 6	S −19	S 0	S − 8	C + 2	C +16	S − 9	S +58	M −48	S + 7
17	Ca + 9	C − 8	Ca −11	S +14	S −19	G −151	C + 5	S −25	S −27	Ca +12	Sa + 1	S + 7
18	C − 4	C + 3	S +11	S − 4	Ca + 4	S +80	C + 4	S +10	Ca +23	C +19	Sa +13	C +11
19	C + 4	Sa −24	S −19	S −20	S + 8	C +18	C − 7	S − 8	Ca + 2	Sa − 29	S + 7	Ca − 2
20	S + 1	S − 1	Sa + 9	S 0	S − 4	C + 9	C + 5	Ca + 2	C + 16	Sa − 6	S + 9	C + 1
21	C + 4	Sa + 8	Sa −18	S +11	S + 1	Sa +15	C + 7	S + 4	S − 3	S +10	S − 1	C + 6
22	S − 4	Sa + 6	Sa − 3	Sa + 7	S + 2	Sa − 5	S − 8	Ca − 6	Sa −36	S −15	S − 2	C + 2
23	C − 2	Sa − 6	S + 5	S − 5	C + 3	Ca +14	C − 3	S + 1	Sa − 7	M −25	Ca + 6	S − 8
24	S − 4	Sa + 3	S + 7	Ca + 8	Ca + 2	S +17	C +11	C − 1	S + 8	Sa +18	C + 7	S 0
25	Sa −14	S + 1	S 0	S − 3	Ca − 5	S −12	Ca − 5	Sa − 1	S + 8	Sa −20	S + 6	S − 2
26	S + 4	Sa − 6	S 0	M −35	S + 3	S + 6	Ca −10	S −32	S 0	Sa +31	S − 1	S −14
27	S − 6	Ca + 5	Ca + 7	Ca +39	S −17	Ca − 3	S −13	S +12	S − 2	S +19	S − 2	S + 8
28	S + 8	C + 7	Ca 0	C + 4	C +14	S 0	C + 3	S + 4	S − 4	Ca 0	S − 4	Ca + 6
29	Ca + 4		S +12	Ca + 6	C + 8	S − 3	S +10	Sa − 4	S − 2	Ca + 7	C + 3	C + 2
30	S + 3		S −15	S − 1	S − 9	C + 6	Ca −13	S 0	S −10	S +12	C + 3	Ca − 5
31	C − 2		Ca + 4		S + 8		Ca +12	Ca + 6		S −10		C + 4
Sum without regard to sign.	209	216	243	259	186	462	240	221	252	484	423	284
	Total number of days in each class.											
C	10	7	6	3	8	11	13	8	11	10	6	10
Ca	4	6	7	9	7	3	5	5	5	5	2	8
S	14	8	14	15	16	11	13	15	12	8	15	11
Sa	3	7	4	2	..	4	..	3	2	7	3	1
M	..	..	..	1	..	..	..	..	..	1	3	..
Ma	..	..	..	..	..	..	..	..	..	..	1	1
G	..	..	..	..	..	1	..	..	..	..	..	..
V. G.	..	..	..	..	..	..	..	..	..	..	..	..
Sum ..	31	28	31	30	31	30	31	31	30	31	30	31

C=Calm ; S=Small ; M=Moderate ; G=Great=V G=Very Great.
The character of the disturbances is determined from the Horizontal Force traces.

The suffix *a* denotes intermediate conditions of activity.
Days are reckoned from 10 a.m. to 10 a.m. of the following day.

TABLE Xa—*Diurnal ranges of Horizontal Force.*

1911.

Unity=1γ.

1911.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	35	39	61	47	42	48	83	37	42	40	46	52
2 ..	74	67	42	46	54	32	42	48	49	90	36	21
3 ..	42	29	80	65	34	41	38	51	22	16	60	29
4 ..	42	40	42	72	39	94	37	35	16	41	35	29
5 ..	24	74	54	41	54	46	33	28	46	31	48	23
6 ..	27	47	50	54	51	64	36	27	23	56	29	90
7 ..	29	34	49	57	125	37	55	32	35	77	42	32
8 ..	47	49	72	94	30	41	46	32	36	52	59	31
9 ..	38	52	32	*	33	46	25	47	32	53	59	30
10 ..	35	55	37	49	55	35	31	65	61	76	41	38
11 ..	24	54	51	40	77	34	27	49	85	46	38	101
12 ..	28	39	49	64	55	18	31	37	41	32	31	19
13 ..	68	60	67	38	46	39	45	70	24	39	63	14
14 ..	39	73	62	38	102	35	26	40	31	41	79	52
15 ..	52	43	42	50	47	33	58	53	32	27	42	30
16 ..	63	68	62	76	37	47	38	58	45	66	25	26
17 ..	32	64	52	68	40	35	73	45	23	90	41	47
18 ..	43	61	45	51	45	55	50	46	17	77	37	17
19 ..	60	23	44	27	48	49	48	26	61	36	46	29
20 ..	27	40	154	38	69	68	37	51	67	47	50	32
21 ..	28	158	46	53	81	62	36	17	72	46	56	21
22 ..	40	49	38	44	34	34	43	25	39	34	40	25
23 ..	38	40	46	35	36	34	31	107	28	44	47	32
24 ..	88	44	55	56	61	33	59	38	43	73	46	19
25 ..	33	60	40	38	55	28	21	49	37	54	50	48
26 ..	37	56	67	45	43	48	39	57	30	42	39	72
27 ..	35	49	47	33	55	42	63	36	27	44	33	19
28 ..	45	57	36	71	23	72	102	41	36	31	24	11
29 ..	38		59	46	49	45	37	28	41	52	49	9
30 ..	56		53	111	97	47	32	34	42	27	42	19
31 ..	58		64		64		42	38		43		23
Monthly Mean ..	42·7	54·4	54·8	53·3	54·2	44·7	44·0	43·5	39·4	49·1	44·4	33·5

The diurnal ranges are derived from twenty-four hourly tabulations of the Horizontal Force Magnetograms during the day. The ranges are aperiodic, *i.e.*, the maximum and the minimum values are taken at whatever hour of the day they have occurred. Days are reckoned from 10 a.m. to 10 a.m. of the following day.

* Owing to loss of curve this day is rejected.

TABLE Xb—*Diurnal ranges of Horizontal Force.*

1912.

Unity=1γ.

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	21	18	28	50	29	48	32	*	33	90	67	17
2 ..	21	44	31	70	31	43	37	46	47	35	48	67
3 ..	26	32	58	47	51	34	58	28	42	41	37	31
4 ..	32	26	25	50	33	36	65	24	36	38	24	27
5 ..	46	21	55	87	131	26	52	37	48	39	63	38
6 ..	45	36	38	50	74	43	57	80	22	69	54	48
7 ..	53	31	53	44	52	24	32	28	24	34	51	39
8 ..	27	43	40	28	48	48	42	22	27	52	47	31
9 ..	50	29	34	52	56	37	38	29	41	42	53	34
10 ..	28	34	44	68	36	36	38	31	29	48	121	31
11 ..	27	42	14	31	41	43	38	24	33	65	49	41
12 ..	50	39	42	53	59	34	37	26	16	44	34	25
13 ..	29	44	39	35	65	43	55	37	25	42	42	32
14 ..	38	34	41	62	40	33	59	39	36	74	188	37
15 ..	21	24	50	76	32	33	47	30	43	46	30	17
16 ..	24	20	39	53	32	38	52	36	18	37	36	20
17 ..	71	39	44	64	37	39	46	36	73	31	32	27
18 ..	46	18	46	45	45	45	47	52	22	41	49	38
19 ..	43	34	45	47	37	37	32	42	27	36	37	24
20 ..	39	34	49	41	30	58	51	32	24	36	45	34
21 ..	23	31	58	41	26	37	30	41	50	50	34	31
22 ..	46	50	36	45	36	63	48	49	44	61	91	63
23 ..	15	60	41	36	42	37	31	44	66	29	34	53
24 ..	61	37	40	54	46	49	34	28	81	30	32	33
25 ..	47	44	47	40	42	47	53	28	47	35	52	21
26 ..	12	29	51	20	32	37	50	29	52	36	71	26
27 ..	29	30	46	39	29	57	36	57	28	54	31	26
28 ..	17	32	47	34	21	80	38	39	23	50	29	36
29 ..	14	42	71	46	26	52	56	32	45	38	25	38
30 ..	28		43	37	47	42	71	23	29	37	28	23
31 ..	35		50		40		52	46		43		34
Monthly Mean.	34·3	34·4	43·4	48·2	43·4	42·6	45·6	36·5	37·7	45·3	51·1	33·6

* Owing to loss of curve this day is rejected.

TABLE Xc—*Diurnal ranges of Horizontal Force.*

1913.

Unity=1γ.

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	21	32	43	42	29	65	29	34	48	36	51	41
2 ..	40	45	40	37	49	22	24	38	40	50	65	44
3 ..	89	25	45	56	57	31	33	43	19	49	62	42
4 ..	37	32	32	65	95	30	39	39	33	34	35	44
5 ..	33	43	28	52	37	28	23	36	21	53	36	41
6 ..	33	40	25	60	66	51	29	32	49	81	49	34
7 ..	37	36	49	63	27	55	46	28	48	43	45	43
8 ..	34	51	59	54	37	49	40	65	73	32	29	30
9 ..	43	42	54	117	32	52	41	77	49	29	31	35
10 ..	57	27	65	42	45	48	42	49	21	58	30	33
11 ..	28	36	49	52	42	45	41	29	23	31	26	29
12 ..	39	53	57	54	51	49	70	29	43	49	51	32
13 ..	38	36	48	30	29	38	51	29	45	52	57	43
14 ..	51	124	128	32	39	43	22	27	17	35	39	52
15 ..	55	21	59	31	33	40	36	27	14	44	37	33
16 ..	29	45	51	68	18	44	51	40	29	31	39	32
17 ..	35	35	43	59	38	39	38	22	38	16	32	23
18 ..	32	32	27	33	25	39	50	26	56	79	42	25
19 ..	54	49	28	49	24	45	47	37	47	53	43	71
20 ..	36	40	43	52	19	37	79	30	46	52	30	27
21 ..	27	43	54	52	36	43	37	30	41	17	27	15
22 ..	31	58	35	61	52	42	45	37	76	39	33	30
23 ..	36	51	76	41	56	31	33	49	37	39	38	24
24 ..	39	48	37	37	58	39	35	21	21	25	38	25
25 ..	58	97	49	38	45	39	67	35	49	31	39	34
26 ..	33	73	65	40	41	51	56	42	41	42	46	40
27 ..	65	19	41	68	48	37	39	43	43	45	63	37
28 ..	48	31	52	29	45	36	56	26	29	53	38	39
29 ..	24		50	27	37	30	39	24	26	50	35	25
30 ..	70		26	29	68	38	51	23	54	44	33	38
31 ..	17		50		30		50	35		46		26
Monthly Mean	40·9	45·1	48·6	49·0	42·2	41·2	43·2	35·5	39·2	43·2	40·6	35·1

TABLE Xd.—*Diurnal ranges of Horizontal Force.*

1914.

Unity=1γ.

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	36	29	40	75	50	48	28	40	37	37	100	35
2 ..	40	46	26	35	50	53	40	48	26	39	54	42
3 ..	29	67	35	52	40	31	36	69	27	47	69	57
4 ..	24	31	36	42	39	41	76	40	43	41	94	61
5 ..	40	32	29	63	59	41	135	45	41	32	45	56
6 ..	21	61	50	190	73	49	35	58	38	40	33	28
7 ..	34	37	32	44	41	53	51	61	33	42	40	39
8 ..	32	30	46	30	49	44	51	49	46	39	41	51
9 ..	35	34	63	49	36	36	67	38	51	48	43	25
10 ..	16	37	41	49	19	33	32	41	61	86	39	32
11 ..	34	38	42	59	50	42	38	65	41	49	126	38
12 ..	75	49	43	46	44	34	38	51	71	42	25	47
13 ..	55	70	51	44	32	25	49	55	44	60	31	21
14 ..	35	35	67	55	42	43	42	45	37	41	59	29
15 ..	49	45	73	59	59	50	41	37	48	62	41	35
16 ..	44	23	39	83	45	42	40	36	72	35	44	64
17 ..	37	31	56	28	55	36	42	43	32	70	51	40
18 ..	29	29	54	32	34	41	44	52	25	54	47	27
19 ..	26	43	62	39	24	49	34	63	16	33	41	41
20 ..	27	28	43	50	24	76	39	52	51	40	44	29
21 ..	24	34	45	49	35	58	51	55	37	35	38	30
22 ..	26	36	27	53	33	43	64	42	27	53	27	43
23 ..	30	42	50	64	37	62	34	48	61	31	25	21
24 ..	28	51	54	30	44	46	34	52	25	44	36	66
25 ..	27	37	39	41	48	113	48	26	29	35	38	30
26 ..	27	41	41	56	56	63	34	39	32	51	50	49
27 ..	32	45	39	85	41	39	42	40	118	79	48	38
28 ..	46	76	38	67	56	26	46	50	42	99	38	57
29 ..	38		46	46	37	60	160	68	58	57	34	26
30 ..	29		48	25	50	30	85	39	35	36	42	27
31 ..	53		59		106		37	25		46		39
Monthly Mean.	34·8	41·3	45·6	54·7	45·4	46·9	51·4	47·5	43·5	48·5	48·1	39·3

TABLE Xe.—*Diurnal ranges of Horizontal Force.*

1915.

Unity=1γ.

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	105	47	40	65	75	52	52	75	56	69	138	29
2 ..	31	52	65	75	55	44	43	71	46	44	51	62
3 ..	50	45	43	69	63	33	68	42	60	64	43	21
4 ..	60	57	64	67	77	47	36	45	49	34	56	25
5 ..	78	42	54	70	64	33	56	60	87	56	99	24
6 ..	41	50	45	70	55	47	101	58	66	43	171	180
7 ..	46	19	81	44	59	42	47	45	63	65	50	36
8 ..	68	84	93	111	52	70	54	44	64	52	66	46
9 ..	26	49	38	39	62	44	75	24	55	43	53	43
10 ..	36	26	25	54	49	37	44	48	64	79	85	61
11 ..	28	35	60	71	43	67	46	49	42	66	64	51
12 ..	56	48	45	61	45	98	64	57	40	51	75	11
13 ..	33	38	39	49	63	51	48	38	89	51	74	18
14 ..	44	48	50	73	54	38	51	71	50	139	47	64
15 ..	29	53	60	82	75	44	66	37	57	115	76	69
16 ..	35	48	58	82	75	73	48	47	67	36	102	42
17 ..	42	68	71	42	56	374	49	75	96	62	80	32
18 ..	26	36	92	54	31	62	66	44	41	71	83	25
19 ..	33	109	75	51	48	47	73	66	28	155	35	43
20 ..	44	47	77	48	47	61	61	66	53	96	36	18
21 ..	29	40	101	58	63	62	53	52	89	47	42	35
22 ..	37	48	43	73	54	64	64	44	110	84	55	32
23 ..	29	62	55	70	64	68	46	34	50	105	43	55
24 ..	75	62	55	40	60	77	72	44	33	36	46	38
25 ..	57	49	49	36	69	97	70	82	32	83	49	41
26 ..	38	58	51	142	38	70	49	47	55	64	51	74
27 ..	44	19	41	64	62	44	99	59	37	76	46	46
28 ..	28	40	35	62	36	59	40	43	62	61	40	29
29 ..	45		54	72	40	52	57	102	42	51	41	40
30 ..	46		63	59	64	61	52	45	69	65	15	26
31 ..	50		51		64		66	42		49		17
Monthly Mean.	44·8	49·2	57·2	65·1	56·8	67·3	58·6	53·4	58·4	68·1	63·7	43·6

TABLE XI*a*—*Diurnal ranges of Declination.*

1911.

Unity = 1 minute of arc.

1911.	Month.											
Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	1·7	2·2	1·4	3·0	3·6	3·5	2·7	4·5	4·1	2·8	1·0	2·8
2 ..	3·2	3·1	2·4	2·1	4·8	2·7	2·6	2·7	5·5	3·3	2·0	1·7
3 ..	1·9	1·7	2·3	2·2	4·1	5·0	3·1	4·8	4·2	3·5	2·3	2·3
4 ..	2·1	2·2	1·4	3·9	5·1	3·5	3·7	3·0	2·8	4·9	1·7	2·5
5 ..	2·9	2·1	2·3	3·5	3·4	3·9	4·0	5·3	3·7	2·6	2·3	2·6
6 ..	1·8	2·6	2·5	2·7	5·0	3·9	3·7	4·2	6·0	3·0	1·3	3·8
7 ..	4·0	1·6	1·1	2·8	4·1	3·3	4·2	5·6	3·3	1·9	1·9	2·2
8 ..	3·1	1·8	2·1	3·9	5·6	3·9	3·4	4·8	4·6	2·7	2·7	3·8
9 ..	3·6	2·6	2·7	3·2	3·4	4·2	3·5	4·2	2·6	2·2	1·6	2·6
10 ..	3·1	2·1	2·2	2·8	2·7	5·5	3·3	6·4	5·9	4·1	1·0	3·0
11 ..	3·0	2·3	3·1	3·5	4·4	3·6	5·7	4·6	4·8	1·8	1·2	4·5
12 ..	3·1	2·0	3·0	2·9	5·0	3·5	5·0	6·1	4·6	2·8	1·6	2·2
13 ..	3·0	2·9	3·1	2·2	4·1	5·7	6·0	6·3	4·9	3·0	2·2	2·1
14 ..	2·8	2·6	2·9	3·4	6·4	4·6	4·2	4·5	4·3	2·3	2·6	2·5
15 ..	1·8	1·8	2·8	5·0	6·7	3·5	3·7	4·8	3·4	1·2	1·3	1·4
16 ..	2·6	2·3	3·1	2·9	4·2	4·8	5·3	3·3	5·3	1·3	1·3	1·9
17 ..	1·6	2·4	2·8	2·7	6·1	4·8	4·5	3·3	3·1	3·0	1·9	1·9
18 ..	3·1	1·8	1·8	4·3	4·8	5·3	3·2	4·3	4·1	4·3	2·2	2·6
19 ..	1·8	1·7	1·5	2·3	4·0	4·8	3·6	4·7	3·6	2·3	1·9	2·8
20 ..	2·1	1·6	2·9	3·1	3·1	4·1	2·6	4·0	4·9	2·0	2·2	1·8
21 ..	1·7	3·4	3·1	3·5	4·4	4·3	2·6	4·5	3·5	2·6	2·3	2·9
22 ..	1·5	2·3	2·9	3·2	4·0	4·1	4·2	3·6	4·9	3·0	1·8	1·5
23 ..	2·4	1·6	2·7	2·4	3·5	2·9	3·2	5·9	3·2	2·4	1·8	1·6
24 ..	2·8	1·7	2·9	3·4	3·0	4·7	4·5	4·8	5·6	1·3	1·8	2·8
25 ..	2·1	1·6	2·5	3·6	4·3	4·7	4·8	5·1	5·1	2·3	2·3	2·4
26 ..	2·2	2·0	2·7	4·5	4·0	4·9	3·5	5·4	4·7	1·8	1·9	2·3
27 ..	2·1	2·3	2·6	5·6	4·2	4·3	6·4	4·5	5·1	2·3	1·9	2·4
28 ..	3·3	2·1	4·2	4·1	5·0	5·1	4·6	5·5	2·2	0·7	1·3	3·6
29 ..	1·9		3·5	4·1	5·1	4·5	3·9	2·9	3·7	1·7	1·6	2·6
30 ..	1·7		3·7	4·1	6·0	4·9	3·4	5·3	3·6	2·1	1·6	2·8
31 ..	2·4		3·6		5·2		3·3	4·9		1·8		2·6
Monthly Mean ..	2·46	2·16	2·64	3·36	4·49	4·28	3·95	4·64	4·24	2·48	1·82	2·53

The diurnal ranges are derived from twenty-four hourly tabulations of the Declination Magnetograms during the day. The ranges are non-periodic, *i.e.*, the maximum and the minimum values are taken at whatever hour of the day they have occurred. Days are reckoned from 10 a.m. to 10 a.m. of the following day.

TABLE XI*b*—*Diurnal ranges of Declination.*

1912.

Unity = 1 minute of arc.

1912. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	2·5	2·3	2·2	4·1	5·5	4·6	6·1	2·5	5·5	2·3	1·6	1·5
2 ..	2·1	1·4	2·9	3·7	4·5	3·4	4·3	2·4	3·6	1·5	1·2	2·7
3 ..	1·5	1·6	3·2	2·6	5·9	4·7	5·2	4·9	3·6	2·2	1·2	1·8
4 ..	2·7	3·1	2·0	2·3	4·6	5·4	5·7	4·0	3·5	3·4	1·0	1·6
5 ..	2·5	3·0	2·1	4·1	4·4	3·7	5·7	4·2	4·7	2·3	1·8	2·0
6 ..	3·1	3·2	2·3	3·9	4·2	6·6	3·6	2·2	2·6	5·3	2·7	3·4
7 ..	2·2	2·7	·1	4·8	4·5	4·2	5·1	2·2	4·6	2·8	2·2	2·9
8 ..	2·9	4·2	2·7	3·9	3·2	4·7	3·9	4·7	5·4	2·6	2·3	1·6
9 ..	5·4	3·4	2·6	2·6	3·0	4·3	5·3	2·3	5·9	3·6	2·0	1·1
10 ..	2·2	3·3	2·6	2·8	5·5	3·0	6·2	3·5	6·4	2·3	2·6	1·1
11 ..	3·7	3·1	2·9	4·5	3·9	4·2	3·6	4·6	6·9	3·7	1·6	1·8
12 ..	2·9	1·7	2·9	3·3	4·1	4·2	4·3	4·1	5·9	3·2	1·6	2·1
13 ..	2·5	2·8	2·6	3·7	3·4	5·0	4·4	4·8	4·8	1·5	1·6	1·2
14 ..	3·0	2·3	3·6	*	4·0	4·8	5·4	5·5	5·1	2·9	3·0	1·0
15 ..	3·0	1·7	4·4	3·7	3·2	6·3	4·1	4·3	5·5	2·1	2·2	1·4
16 ..	2·1	3·3	2·8	2·9	5·1	5·3	3·6	5·4	3·1	2·3	1·0	1·5
17 ..	2·1	3·7	3·8	2·9	4·6	3·2	4·7	5·0	5·6	1·4	1·0	1·6
18 ..	2·2	2·5	3·9	3·7	4·3	5·4	5·2	4·7	6·2	1·6	2·2	1·2
19 ..	3·0	1·9	4·8	3·1	5·6	3·7	3·6	2·9	7·1	2·3	1·3	1·2
20 ..	2·5	2·5	4·4	3·2	3·9	3·6	4·2	6·1	5·9	1·5	2·5	1·7
21 ..	3·2	2·1	3·0	3·3	3·6	2·4	2·9	3·4	4·0	2·1	1·7	1·7
22 ..	2·5	1·8	2·7	2·8	5·3	6·0	5·1	4·1	3·3	2·4	2·9	2·6
23 ..	2·6	2·1	3·5	2·7	5·5	5·1	3·4	4·6	3·4	1·9	2·5	2·3
24 ..	2·2	1·1	2·6	4·0	4·4	4·6	3·2	3·9	2·2	2·2	1·1	2·0
25 ..	3·2	2·1	3·2	4·1	3·4	4·1	4·8	3·5	5·1	2·4	1·6	1·9
26 ..	3·0	2·7	4·6	4·7	5·7	4·4	4·5	1·9	3·7	1·8	1·8	1·0
27 ..	2·0	2·1	4·0	4·4	4·3	3·1	4·1	4·6	3·3	2·3	1·0	1·3
28 ..	2·9	1·3	2·6	5·0	3·7	4·6	2·8	5·5	2·5	1·7	1·1	1·4
29 ..	2·8	2·5	2·8	6·2	3·1	4·1	4·6	6·2	2·7	2·3	1·2	1·3
30 ..	2·0		2·9	4·6	2·2	4·7	4·4	5·9	1·3	2·0	0·8	1·8
31 ..	2·1		3·0		3·3		5·2	7·5		0·9		2·1
Monthly Mean.	2·66	2·47	3·09	3·71	4·25	4·45	4·49	4·24	4·45	2·35	1·74	1·74

* Owing to loss of curve this day is rejected.

TABLE XI*c*—*Diurnal ranges of Declination.*

1913.

Unity =1 minute of arc.

1913. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ..	1·6	1·8	1·5	3·1	4·2	5·4	4·1	3·5	6·6	4·3	1·6	2·4
2 ..	1·8	2·1	1·2	4·7	3·7	5·8	5·6	4·9	7·6	4·8	1·7	2·4
3 ..	2·9	2·4	1·5	2·9	5·3	4·6	3·5	4·6	5·6	4·2	1·2	1·3
4 ..	3·1	1·9	3·0	3·2	6·3	4·2	5·9	3·9	7·1	3·1	1·1	1·9
5 ..	1·7	1·5	2·6	4·8	3·2	6·0	4·0	4·2	6·7	3·0	1·9	1·5
6 ..	2·1	1·7	2·2	4·6	4·5	4·1	6·5	3·8	4·2	3·3	1·6	2·2
7 ..	1·7	1·1	2·2	4·3	4·4	6·2	3·9	4·4	5·0	3·6	1·3	2·3
8 ..	1·6	2·2	1·8	2·9	4·6	5·6	3·6	4·6	4·7	3·2	1·9	2·1
9 ..	1·6	1·2	2·2	4·2	2·7	4·0	3·7	3·8	5·8	2·7	1·1	2·1
10 ..	2·2	0·9	1·3	3·0	4·7	4·6	3·6	5·1	3·9	3·6	1·9	1·9
11 ..	2·0	2·4	1·3	2·7	4·1	3·3	3·8	4·9	4·8	2·8	1·6	2·3
12 ..	2·4	2·0	1·7	2·6	5·7	4·4	4·1	4·8	4·1	3·3	1·5	1·7
13 ..	1·8	1·4	1·7	3·0	3·8	2·5	5·0	4·2	5·4	2·1	1·7	2·7
14 ..	1·8	2·3	3·5	4·3	3·9	4·9	4·4	4·3	3·6	2·4	2·9	2·4
15 ..	3·1	1·6	3·0	4·5	5·1	4·1	4·8	3·7	2·8	2·7	2·3	2·2
16 ..	2·6	1·2	1·9	2·4	4·5	5·1	4·6	4·8	5·8	3·4	1·8	2·2
17 ..	3·6	1·9	2·0	5·1	4·0	4·5	4·3	5·0	3·4	1·8	1·1	1·5
18 ..	1·6	1·9	1·9	4·8	3·7	5·8	3·3	6·1	5·4	3·4	1·3	2·1
19 ..	3·3	1·5	1·3	3·5	3·5	5·7	3·7	6·8	4·6	2·2	1·0	1·7
20 ..	3·1	2·6	2·6	3·8	4·1	4·3	4·3	5·2	4·4	2·2	0·7	1·9
21 ..	2·9	2·7	2·4	3·4	3·4	5·1	3·3	5·3	4·2	1·7	0·8	1·7
22 ..	2·2	2·3	3·4	4·4	4·2	4·3	4·1	5·1	5·7	1·7	1·1	1·2
23 ..	2·7	1·6	3·1	1·9	5·0	3·7	4·3	5·3	4·8	3·5	1·5	1·5
24 ..	1·5	1·1	3·1	2·8	4·5	6·9	4·6	3·2	3·2	2·5	2·8	1·9
25 ..	2·7	2·0	3·2	3·1	4·2	2·6	4·9	4·7	2·6	3·3	1·8	2·7
26 ..	2·2	1·6	2·8	3·9	5·9	5·5	4·6	5·2	1·8	1·9	1·8	2·4
27 ..	4·0	0·8	2·7	4·4	5·6	2·9	3·5	6·2	2·6	2·0	2·1	2·0
28 ..	2·3	2·0	2·0	3·9	4·8	4·9	3·8	5·5	3·5	1·6	1·6	2·7
29 ..	2·9		3·2	3·8	4·1	4·8	4·0	3·4	4·0	1·6	2·4	1·8
30 ..	2·1		3·3	5·5	5·6	3·2	4·5	4·9	4·8	1·5	2·5	2·0
31 ..	3·2		3·0		3·0		4·1	4·8		1·6		1·4
Monthly Mean.	2·40	1·77	2·34	3·72	4·40	4·63	4·27	4·72	4·62	2·74	1·65	2·00

TABLE XI*d*—*Diurnal ranges of Declination.*

1914.

Unity=1 minute of arc.

1914. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	′	′	′	′	′	′	′	′	′	′	′	′
1 ..	2·2	2·8	2·7	2·5	3·4	3·7	5·4	6·0	5·1	3·4	2·0	1·4
2 ..	1·7	2·3	1·7	2·2	3·4	3·7	4·1	5·2	6·6	5·8	2·4	2·2
3 ..	1·6	3·2	1·2	2·9	3·2	3·2	3·9	5·0	7·2	2·8	1·8	1·6
4 ..	2·5	2·3	3·1	3·4	4·5	3·9	5·3	5·6	7·6	4·2	2·4	3·8
5 ..	1·6	1·5	2·0	3·1	5·4	5·6	4·7	5·2	6·8	3·4	1·6	2·8
6 ..	1·1	3·2	2·0	4·1	4·9	4·5	4·0	4·6	6·3	3·3	2·3	1·9
7 ..	1·6	2·6	1·0	3·6	4·3	4·4	4·7	4·8	5·8	4·3	2·3	1·5
8 ..	1·5	1·9	1·1	4·7	3·5	3·6	6·6	5·9	7·8	3·1	1·7	1·5
9 ..	1·8	1·5	2·4	3·9	5·9	4·1	5·5	4·5	4·6	2·5	1·8	1·7
10 ..	1·9	2·4	3·4	4·3	4·3	4·1	5·2	4·5	5·6	3·3	2·5	2·1
11 ..	1·7	2·9	2·8	4·1	6·4	3·9	5·8	6·5	4·7	2·5	3·6	1·5
12 ..	2·0	2·4	3·4	3·8	2·3	4·5	4·6	7·2	6·0	4·6	1·4	2·5
13 ..	2·6	2·7	2·8	4·0	4·0	4·7	5·4	5·6	5·1	2·5	2·7	2·2
14 ..	3·3	3·1	2·2	3·4	3·5	3·2	6·1	7·3	3·7	2·6	2·1	2·3
15 ..	1·9	1·7	3·6	3·3	4·1	5·3	4·7	3·9	5·1	3·4	1·8	2·0
16 ..	2·5	2·4	2·9	4·2	5·4	5·0	5·0	5·5	4·7	2·6	1·1	2·9
17 ..	2·6	1·7	3·3	3·9	4·1	3·4	4·1	4·5	3·5	3·6	1·4	1·6
18 ..	2·8	1·8	1·5	5·6	4·3	5·7	4·4	5·1	3·5	3·8	1·2	1·6
19 ..	3·2	2·0	2·7	5·1	5·3	6·4	3·6	5·9	3·7	2·2	1·4	1·3
20 ..	2·4	2·1	2·9	3·8	3·5	6·2	3·7	5·6	6·6	3·2	1·4	1·8
21 ..	2·9	2·1	3·3	4·9	3·4	6·2	3·1	5·1	6·5	4·7	1·2	1·6
22 ..	2·0	1·4	3·3	3·4	3·4	2·0	4·4	6·3	6·1	4·0	1·1	1·6
23 ..	1·1	2·2	2·8	4·0	4·3	5·9	5·7	5·0	5·8	4·4	1·4	2·1
24 ..	2·3	1·9	3·3	3·6	4·6	6·0	5·5	6·7	3·4	2·8	1·1	2·5
25 ..	2·9	2·5	3·2	5·8	4·1	6·3	5·5	5·2	4·4	1·9	2·0	2·1
26 ..	4·3	1·7	4·8	2·6	4·6	4·7	4·4	6·4	4·0	2·3	2·1	1·9
27 ..	3·0	2·2	3·6	3·5	5·3	4·0	5·5	6·2	8·4	3·8	1·9	2·9
28 ..	2·7	3·1	4·6	3·4	6·4	4·2	4·4	6·4	5·0	3·1	2·4	3·5
29 ..	3·0		4·1	2·5	3·6	5·9	4·0	5·3	4·6	2·3	1·8	1·8
30 ..	2·4		3·6	2·8	6·7	3·0	3·7	5·1	4·3	1·1	1·9	2·7
31 ..	5·5		3·1		3·5		4·8	4·8		1·5		2·5
Monthly Mean.	2·41	2·27	2·85	3·75	4·37	4·58	4·77	5·51	5·42	3·19	1·85	2·11

TABLE XI*e*—*Diurnal ranges of Declination.*

1915.

Unity=1 minute of arc.

1915. Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	′	′	′	′	′	′	′	′	′	′	′	′
1 ..	4·4	2·0	1·8	4·8	6·9	3·8	3·5	8·7	5·2	5·4	3·6	2·7
2 ..	2·2	4·2	2·8	5·3	5·3	3·1	4·7	4·6	6·1	3·0	3·1	2·8
3 ..	2·2	3·0	4·2	5·5	6·4	4·7	4·3	4·8	6·0	4·9	2·3	2·2
4 ..	2·6	3·6	3·9	3·5	4·5	4·9	3·5	5·8	7·2	2·9	2·2	1·1
5 ..	2·4	3·1	3·3	4·6	3·7	5·0	4·5	6·1	6·1	4·4	4·4	2·3
6 ..	2·3	2·3	2·3	3·7	3·0	4·6	4·1	5·2	7·8	2·1	3·5	3·8
7 ..	4·6	2·8	4·5	4·5	3·3	5·8	3·8	6·8	9·1	2·0	3·1	1·9
8 ..	3·2	3·1	2·9	5·9	5·6	6·1	5·4	3·8	5·1	3·6	3·4	1·3
9 ..	4·0	2·2	4·6	4·6	3·6	5·4	6·8	6·4	7·5	2·0	3·6	2·0
10 ..	2·9	3·1	4·4	4·2	3·3	4·7	5·6	6·1	6·4	2·5	2·5	2·0
11 ..	3·5	1·0	4·0	5·0	3·4	6·6	4·4	5·1	5·6	3·4	2·1	3·2
12 ..	4·2	1·8	5·0	4·9	4·1	6·1	7·3	5·9	6·5	3·4	2·5	2·1
13 ..	2·2	2·5	3·5	5·4	4·9	5·1	5·6	4·1	5·2	3·2	3·0	2·6
14 ..	1·3	4·5	3·3	5·1	3·8	4·7	7·2	6·0	4·3	3·6	1·9	2·3
15 ..	2·3	2·7	2·9	5·3	5·7	4·5	8·8	5·2	4·6	4·1	2·4	2·8
16 ..	2·3	2·8	3·2	5·2	4·7	4·9	7·2	4·7	4·3	3·0	3·7	2·0
17 ..	2·1	3·4	3·4	6·0	2·8	8·4	6·9	5·0	4·6	3·0	3·6	1·1
18 ..	1·5	3·4	3·2	5·4	4·0	6·5	6·5	5·4	5·0	1·9	4·3	2·0
19 ..	1·8	4·3	2·8	3·6	6·2	4·7	4·9	5·7	6·9	3·5	3·0	2·6
20 ..	2·3	3·0	2·1	3·8	3·6	5·7	7·5	4·2	6·1	3·1	3·4	1·8
21 ..	2·9	3·7	4·9	3·7	4·0	6·1	6·8	6·0	7·2	2·5	2·2	1·8
22 ..	3·3	3·4	2·3	4·7	5·4	4·4	5·1	4·7	5·4	3·2	2·4	1·9
23 ..	3·0	3·0	3·0	5·1	6·3	4·0	5·1	5·0	5·0	4·4	2·7	1·2
24 ..	2·6	4·1	2·2	4·9	4·6	7·4	6·0	4·0	6·4	2·2	3·5	1·9
25 ..	2·9	3·5	1·6	5·0	5·2	4·7	6·1	6·4	4·7	3·5	2·7	2·7
26 ..	2·4	2·5	3·6	4·9	4·1	4·0	6·9	7·7	6·9	1·9	2·7	3·2
27 ..	2·6	1·2	3·0	4·6	5·3	6·5	6·7	5·2	4·8	2·2	2·7	3·3
28 ..	1·8	2·3	2·2	5·5	5·4	5·3	8·2	6·9	5·0	2·3	2·4	2·5
29 ..	3·1		3·7	5·1	4·9	6·1	7·0	6·6	4·0	3·2	3·6	1·5
30 ..	3·4		4·5	7·0	3·3	3·3	5·6	4·9	4·1	2·4	1·4	4·0
31 ..	3·9		5·4		5·2		5·4	7·3		2·7		2·5
Monthly Mean.	2·78	2·95	3·37	4·89	4·60	5·24	5·85	5·62	5·77	3·08	2·93	2·29

Horizontal Force Magnetograph.

TABLE XIIa.—*Showing the mean diurnal inequality of Horizontal Force for each month of the year 1911, and for the whole year.*

Unity=0.1γ

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 52	+158	+226	+235	+252	+240	+175	+181	+148	+107	+210	+205	+112	+187
10 52	+190	+264	+275	+295	+250	+235	+226	+218	+166	+253	+242	+145	+230
11 52	+181	+260	+269	+262	+250	+234	+230	+220	+180	+248	+201	+127	+222
12 52	+113	+177	+196	+174	+195	+197	+193	+195	+168	+173	+130	+ 84	+166
13 52	+ 55	+ 63	+ 98	+ 86	+104	+130	+125	+118	+ 97	+ 86	+ 60	+ 27	+ 87
14 52	+ 26	− 31	− 12	+ 44	0	+ 31	+ 51	+ 52	+ 19	+ 5	− 4	− 19	+ 13
15 52	− 24	− 81	− 65	− 33	− 69	− 47	− 17	− 16	− 18	− 26	− 50	− 21	− 39
16 52	− 69	− 94	− 93	− 70	−108	− 87	− 62	− 69	− 36	− 57	− 92	− 31	− 72
17 52	− 94	−124	−108	−109	−125	−101	− 88	− 86	− 45	− 83	−100	− 51	− 93
18 52	− 86	−158	−138	−143	−142	−104	−109	−111	− 67	−117	−108	− 56	−112
19 52	− 98	−173	−122	−130	−135	− 97	−101	−103	− 72	−122	−111	− 93	−113
20 52	− 81	−143	−116	−125	−143	− 96	−103	−111	− 89	−130	−111	− 87	−111
21 52	− 87	− 97	− 93	−103	−106	− 74	− 89	− 99	− 74	−122	−103	− 75	− 93
22 52	− 50	− 65	− 91	− 85	− 71	− 81	− 88	− 70	− 53	− 89	− 83	− 50	− 73
23 52	− 65	− 82	− 84	− 72	− 62	− 82	− 71	− 68	− 49	− 86	− 57	− 40	− 68
0 52	− 71	− 51	− 63	− 86	− 69	− 79	− 65	− 52	− 40	− 76	− 46	− 38	− 61
1 52	− 60	− 56	− 66	− 36	− 58	− 82	− 59	− 52	− 23	− 56	− 40	− 21	− 51
2 52	− 45	− 51	− 62	− 50	− 53	− 84	− 61	− 46	− 26	− 41	− 34	− 17	− 47
3 52	− 52	− 42	− 57	− 47	− 41	− 61	− 59	− 33	− 17	− 30	− 44	− 12	− 41
4 52	− 24	− 27	− 49	− 43	− 38	− 59	− 60	− 42	− 13	− 37	− 43	− 6	− 37
5 52	− 2	− 14	− 33	− 67	− 45	− 50	− 42	− 36	− 15	− 27	− 27	+ 12	− 29
6 52	+ 19	+ 24	− 21	− 50	− 6	− 1	− 28	− 27	− 52	− 21	+ 6	+ 13	− 12
7 52	+ 56	+ 96	+ 52	+ 11	+ 66	+ 58	+ 6	− 1	− 62	+ 26	+ 67	+ 35	+ 34
8 52	+114	+181	+152	+130	+159	+121	+ 89	+ 74	+ 19	+112	+136	+ 62	+112
Range..	288	437	413	438	393	339	339	331	269	383	353	238	343
*Summed Range..	1,820	2,580	2,550	2,503	2,535	2,366	2,203	2,047	1,507	2,233	2,100	1,234	2,103

TABLE XIIb.—*Showing the mean diurnal inequality of Horizontal Force for each month of the year 1912, and for the whole year.*

Unity=0.1γ

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 52	+119	+102	+191	+249	+219	+213	+221	+126	+139	+212	+235	+162	+182
10 52	+169	+166	+263	+289	+241	+257	+273	+179	+187	+262	+276	+177	+228
11 52	+145	+215	+264	+261	+222	+231	+272	+180	+192	+259	+244	+148	+219
12 52	+116	+181	+214	+197	+180	+180	+214	+172	+157	+168	+144	+ 88	+168
13 52	+ 70	+114	+133	+ 98	+101	+107	+142	+114	+100	+ 70	+ 54	+ 37	+ 95
14 52	+ 20	+ 47	+ 35	+ 26	+ 26	+ 44	+ 58	+ 51	+ 38	0	− 3	+ 19	+ 30
15 52	− 6	− 7	− 28	− 13	− 32	− 24	− 20	− 11	− 3	− 35	− 37	− 8	− 19
16 52	− 36	− 28	− 42	− 47	− 74	− 70	− 80	− 61	− 26	− 57	− 79	− 41	− 53
17 52	− 69	− 40	− 59	− 72	− 82	− 97	−102	− 67	− 45	− 80	−110	− 57	− 73
18 52	− 72	− 53	− 77	− 93	− 98	−101	−117	− 76	− 67	−106	−135	− 71	− 89
19 52	− 72	− 69	−101	−106	−102	− 99	−115	− 77	− 78	−132	−145	− 81	− 98
20 52	− 80	− 82	−108	−108	−103	− 97	−111	− 82	− 83	−137	−151	− 89	−103
21 52	− 71	− 90	−116	−113	−100	− 89	−103	− 71	− 86	−126	−122	− 99	− 99
22 52	− 67	− 81	−100	−111	− 90	− 80	−107	− 55	− 84	− 90	−101	− 86	− 88
23 52	− 56	− 67	− 97	− 93	− 80	− 82	−104	− 53	− 72	− 97	− 90	− 78	− 81
0 52	− 58	− 55	− 98	− 81	− 70	− 80	− 90	− 48	− 56	− 82	− 64	− 66	− 71
1 52	− 41	− 49	− 85	− 87	− 62	− 76	− 96	− 46	− 38	− 44	− 58	− 49	− 61
2 52	− 36	− 45	− 76	− 96	− 64	− 80	− 95	− 38	− 45	− 56	− 51	− 47	− 61
3 52	− 38	− 51	− 64	− 74	− 64	− 82	− 93	− 33	− 28	− 51	− 46	− 35	− 55
4 52	− 16	− 46	− 66	− 60	− 64	− 70	− 88	− 31	− 26	− 41	− 42	− 27	− 48
5 52	− 14	− 39	− 64	− 67	− 58	− 54	− 60	− 39	− 32	− 29	− 16	− 13	− 40
6 52	+ 1	− 39	− 40	− 54	− 24	− 16	− 6	− 40	− 50	− 5	+ 32	+ 29	− 18
7 52	+ 26	− 21	+ 15	+ 11	+ 42	+ 39	+ 57	− 29	− 38	+ 53	+ 98	+ 68	+ 27
8 52	+ 61	+ 32	+102	+141	+136	+125	+145	+ 33	+ 40	+140	+167	+117	+103
Range..	249	305	380	402	344	358	390	262	278	399	427	276	331
*Summed Range..	1,459	1,719	2,438	2,547	2,334	2,393	2,769	1,712	1,710	2,332	2,500	1,692	2,109

*Summed range means sum without regard to sign of the twenty-four ordinates of the diurnal inequality.

For the magnitude of the temperature and aperiodic corrections applicable to the diurnal inequalities, *vide* Tables XVI and XVIII.

Horizontal Force Magnetograph.

TABLE XIIc.—*Showing the mean diurnal inequality of Horizontal Force for each month of the year 1913 and for the whole year.*

Unity=0·1γ

1913. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
9 51	+153	+198	+231	+262	+214	+198	+183	+145	+127	+196	+210	+184	+192
10 51	+187	+235	+286	+293	+252	+244	+240	+196	+194	+230	+233	+186	+231
11 51	+202	+229	+269	+256	+240	+233	+252	+201	+217	+208	+196	+142	+220
12 51	+141	+173	+201	+195	+188	+189	+227	+188	+187	+120	+123	+ 88	+168
13 51	+ 64	+ 81	+112	+114	+103	+120	+164	+140	+114	+ 27	+ 49	+ 44	+ 94
14 51	+ 25	+ 16	+ 50	+ 44	+ 32	+ 47	+ 83	+ 73	+ 35	− 23	− 2	+ 11	+ 33
15 51	− 20	− 34	+ 2	+ 8	− 20	− 20	+ 5	+ 23	− 15	− 37	− 32	− 20	− 13
16 51	− 59	− 67	− 34	− 31	− 56	− 71	− 71	− 37	− 57	− 64	− 57	− 48	− 54
17 51	− 72	− 86	− 65	− 72	− 74	−105	−107	− 61	− 64	− 72	− 81	− 67	− 77
18 51	−100	− 97	− 96	−108	− 87	−111	−117	− 73	− 77	− 94	− 83	− 75	− 93
19 51	− 95	−100	−114	−129	−102	−103	−115	− 85	− 85	− 91	− 84	− 87	− 99
20 51	− 90	−103	−125	−126	−111	−105	−117	− 86	− 81	− 78	−102	− 81	−100
21 51	− 86	−118	−116	−125	−103	− 95	−117	− 89	− 69	− 91	−107	− 80	−100
22 51	− 84	−114	−118	−114	− 93	− 93	−101	− 79	− 65	− 79	− 92	− 85	− 93
23 51	− 75	− 89	− 97	− 94	− 90	− 79	− 89	− 69	− 51	− 72	− 88	− 80	− 81
0 51	− 70	− 68	− 98	− 85	− 80	− 81	− 81	− 68	− 53	− 69	− 83	− 75	− 76
1 51	− 50	− 66	− 84	− 86	− 71	− 79	− 80	− 66	− 48	− 54	− 75	− 68	− 69
2 51	− 53	− 69	− 79	− 78	− 77	− 71	− 73	− 55	− 38	− 46	− 62	− 65	− 64
3 51	− 48	− 65	− 69	− 64	− 75	− 66	− 71	− 64	− 35	− 34	− 55	− 51	− 58
4 51	− 33	− 48	− 73	− 67	− 67	− 70	− 71	− 63	− 33	− 35	− 50	− 38	− 54
5 51	− 15	− 35	− 60	− 67	− 57	− 61	− 64	− 61	− 30	− 19	− 34	− 20	− 44
6 51	+ 12	+ 5	− 49	− 60	− 38	− 12	− 22	− 54	− 60	− 5	+ 25	+ 30	− 19
7 51	+ 56	+ 70	+ 14	+ 3	+ 35	+ 54	+ 36	− 15	− 54	+ 54	+ 96	+ 98	+ 37
8 51	+105	+147	+113	+134	+132	+131	+108	+ 65	+ 37	+131	+161	+152	+118
Range ..	302	353	411	422	363	355	369	290	302	324	340	273	331
Summed Range ..	1,895	2,313	2,555	2,615	2,397	2,438	2,594	2,056	1,826	1,929	2,180	1,875	2,187

TABLE XIId.—*Showing the mean diurnal inequality of Horizontal Force for each month of the year 1914 and for the whole year.*

Unity=0·1γ

1914. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
9 51	+152	+154	+202	+255	+214	+234	+210	+181	+146	+161	+211	+183	+192
10 51	+188	+211	+261	+303	+262	+275	+266	+239	+209	+227	+245	+202	+241
11 51	+181	+235	+263	+293	+266	+259	+257	+253	+204	+262	+212	+176	+238
12 51	+125	+189	+201	+248	+219	+202	+232	+209	+164	+199	+140	+126	+188
13 51	+ 60	+114	+116	+154	+135	+129	+170	+145	+110	+ 95	+ 67	+ 53	+112
14 51	+ 23	+ 55	+ 30	+ 67	+ 53	+ 44	+ 83	+ 71	+ 43	− 8	+ 9	+ 6	+ 40
15 51	− 14	+ 2	− 35	+ 9	− 6	− 35	− 18	− 14	− 6	− 62	− 38	− 24	− 20
16 51	− 38	− 29	− 59	− 51	− 53	− 95	− 67	− 83	− 36	− 90	− 73	− 49	− 60
17 51	− 56	− 51	− 71	− 88	− 78	−104	−119	−118	− 63	−104	−106	− 62	− 85
18 51	− 71	− 73	− 87	−110	− 91	−109	−139	−119	− 89	−117	−130	− 64	−100
19 51	− 80	−105	− 91	−115	−103	−120	−154	−109	−100	−107	−137	− 69	−107
20 51	− 84	−107	−100	−149	−104	−119	−141	−108	−104	−110	−119	− 84	−111
21 51	− 92	−113	−121	−145	−109	−110	−132	− 98	− 85	− 99	−112	− 94	−109
22 51	− 83	− 98	−105	−155	−112	− 99	−101	−101	− 83	− 84	−100	− 84	−100
23 51	− 80	− 83	− 83	−134	− 92	− 94	− 93	− 82	− 54	− 81	− 91	−102	− 89
0 51	− 67	− 85	− 78	−112	− 92	− 77	− 90	− 73	− 55	− 49	− 80	− 88	− 79
1 51	− 63	− 67	− 77	−105	− 71	− 85	− 73	− 75	− 42	− 52	− 65	− 67	− 70
2 51	− 54	− 63	− 65	− 84	− 72	− 83	− 75	− 66	− 44	− 28	− 52	− 61	− 62
3 51	− 56	− 61	− 73	− 78	− 71	− 84	− 81	− 65	− 32	− 22	− 33	− 53	− 59
4 51	− 45	− 56	− 61	− 70	− 79	− 78	− 72	− 51	− 19	− 18	− 30	− 45	− 52
5 51	− 25	− 39	− 59	− 54	− 71	− 65	− 57	− 46	− 33	− 14	− 8	− 21	− 41
6 51	+ 10	− 31	− 43	− 42	− 63	− 12	− 10	− 27	− 61	− 8	+ 35	+ 23	− 19
7 51	+ 54	+ 13	+ 14	+ 27	+ 9	+ 63	+ 57	+ 18	+ 29	+ 17	+100	+ 75	+ 40
8 51	+110	+ 81	+115	+136	+106	+159	+142	+118	+ 54	+ 91	+155	+127	+116
Range ..	280	348	384	458	378	395	420	372	313	379	382	304	352
Summed Range ..	1,811	2,115	2,410	2,984	2,531	2,734	2,839	2,469	1,865	2,105	2,348	1,938	2,330

Horizontal Force Magnetograph.

TABLE XIIe.—*Showing the mean diurnal inequality of Horizontal Force for each month of the year 1915, and for the whole year.*

Unity=0·1γ

1915. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	+181	+179	+244	+311	+278	+301	+268	+212	+238	+269	+245	+159	+240
10 51	+236	+241	+313	+378	+332	+337	+328	+287	+294	+346	+304	+219	+301
11 51	+219	+266	+310	+357	+304	+349	+339	+290	+306	+353	+254	+209	+296
12 51	+145	+222	+251	+294	+237	+310	+303	+247	+282	+262	+164	+142	+238
13 51	+ 73	+152	+149	+187	+138	+179	+211	+162	+181	+139	+ 50	+ 82	+142
14 51	+ 10	+ 49	+ 49	+ 94	+ 58	+ 20	+105	+ 60	+ 77	+ 21	− 9	+ 49	+ 49
15 51	− 44	− 20	− 13	+ 12	− 16	−106	− 14	− 1	− 14	− 36	− 98	− 2	− 29
16 51	− 75	− 64	− 75	− 49	− 64	−166	− 89	− 69	− 76	− 86	−127	− 58	− 83
17 51	− 97	− 84	−111	−108	− 93	−194	−139	− 91	−109	−125	−140	− 98	−116
18 51	− 94	−101	−103	−131	−120	−176	−150	−116	−125	−148	−163	−110	−128
19 51	− 99	−109	−113	−136	−128	−175	−153	−125	−147	−165	−164	−117	−136
20 51	−111	−129	−134	−150	−134	−180	−150	−121	−142	−183	−145	−111	−141
21 51	− 97	−103	−132	−156	−132	−172	−145	−127	−140	−187	− 99	− 91	−132
22 51	− 92	−116	−144	−162	−119	−123	−118	−117	−111	−118	−101	− 83	−117
23 51	− 68	−106	−107	−147	−125	−107	−134	−101	− 99	−103	− 96	− 80	−106
0 51	− 68	− 99	−104	−116	−120	− 91	−125	− 75	− 87	− 99	− 64	− 64	− 93
1 51	− 63	− 69	− 86	−115	− 96	− 90	−120	− 74	− 67	− 87	− 37	− 60	− 80
2 51	− 54	− 60	− 57	−117	−105	− 85	−112	− 83	− 47	− 52	− 34	− 40	− 70
3 51	− 52	− 65	− 74	−105	− 81	− 62	−110	− 87	− 53	− 55	− 23	− 24	− 66
4 51	− 38	− 38	− 68	− 96	− 91	− 55	−102	− 78	− 43	− 51	− 28	− 26	− 59
5 51	− 17	− 32	− 66	− 85	− 82	− 35	− 86	− 60	− 59	− 37	+ 4	− 15	− 47
6 51	+ 17	− 23	− 52	− 83	− 57	+ 26	− 34	− 53	− 83	− 36	+ 26	+ 5	− 29
7 51	+ 63	+ 11	+ 9	− 18	+ 47	+103	+ 59	+ 10	− 65	+ 25	+ 91	+ 37	+ 31
8 51	+125	+ 94	+117	+143	+173	+195	+165	+112	+ 88	+150	+189	+ 78	+136
Range ..	347	395	457	540	466	543	492	417	453	540	468	336	442
Summed Range ..	2,138	2,432	2,881	3,550	3,130	3,637	3,559	2,758	2,933	3,133	2,655	1,959	2,865

TABLE XIIf.—*Showing for the summer months (April to September), the winter months (January to March and October to December) and the whole year, the mean diurnal inequality of Horizontal Force during the period 1911-1915.*

Unity=0·1γ

Years. Bombay Civil Time.	1911. April to September.	1911. January to March and October to December.	1911. Year.	1912. April to September.	1912. January to March and October to December.	1912. Year.	1913. April to September.	1913. January to March and October to December.	1913. Year.	1914. April to September.	1914. January to March and October to December.	1914. Year.	1915. April to September.	1915. January to March and October to December.	1915. Year.
H. m.															
9 51	+184	+191	+187	+194	+170	+182	+188	+195	+192	+207	+177	+192	+268	+213	+240
10 51	+232	+228	+230	+238	+219	+228	+236	+226	+231	+259	+222	+241	+326	+276	+301
11 51	+229	+214	+222	+226	+212	+219	+233	+208	+220	+255	+221	+238	+324	+268	+296
12 51	+187	+145	+166	+183	+152	+168	+196	+141	+168	+212	+163	+188	+279	+198	+238
13 51	+110	+ 65	+ 87	+110	+ 80	+ 95	+126	+ 63	+ 94	+140	+ 84	+112	+176	+107	+142
14 51	+ 33	− 6	+ 13	+ 40	+ 20	+ 30	+ 52	+ 13	+ 32	+ 60	+ 19	+ 40	+ 69	+ 28	+ 49
15 51	− 33	− 44	− 39	− 17	− 20	− 19	− 3	− 23	− 13	− 12	− 28	− 20	− 23	− 35	− 29
16 51	− 72	− 73	− 72	− 60	− 47	− 53	− 54	− 55	− 54	− 61	− 56	− 60	− 85	− 81	− 83
17 51	− 92	− 93	− 93	− 77	− 69	− 73	− 80	− 74	− 77	− 95	− 75	− 85	−122	−109	−116
18 51	−113	−110	−112	− 92	− 86	− 89	− 95	− 91	− 93	−109	− 90	−100	−136	−120	−128
19 51	−106	−120	−113	− 96	−100	− 98	−103	− 95	− 99	−117	− 98	−107	−144	−128	−136
20 51	−111	−111	−111	− 97	−108	−103	−104	− 96	−100	−121	−101	−111	−146	−135	−141
21 51	− 91	− 96	− 93	− 94	−104	− 99	−100	−100	−100	−113	−105	−109	−145	−118	−132
22 51	− 75	− 71	− 73	− 88	− 87	− 88	− 91	− 95	− 93	−108	− 92	−100	−125	−109	−117
23 51	− 67	− 69	− 68	− 81	− 81	− 81	− 79	− 83	− 81	− 91	− 87	− 89	−119	− 93	−106
0 51	− 65	− 57	− 61	− 71	− 70	− 71	− 75	− 77	− 76	− 83	− 74	− 79	−102	− 83	− 93
1 51	− 52	− 50	− 51	− 67	− 54	− 61	− 72	− 66	− 69	− 75	− 65	− 70	− 94	− 67	− 80
2 51	− 53	− 42	− 47	− 70	− 52	− 61	− 65	− 62	− 64	− 71	− 54	− 62	− 91	− 49	− 70
3 51	− 43	− 39	− 41	− 62	− 47	− 55	− 62	− 54	− 58	− 68	− 50	− 59	− 83	− 49	− 66
4 51	− 42	− 31	− 37	− 56	− 40	− 48	− 62	− 46	− 54	− 61	− 42	− 52	− 77	− 41	− 59
5 51	− 42	− 15	− 29	− 52	− 29	− 40	− 57	− 30	− 44	− 54	− 28	− 41	− 68	− 27	− 47
6 51	− 27	+ 3	− 12	− 32	− 4	− 18	− 41	+ 3	− 19	− 36	− 2	− 19	− 47	− 10	− 29
7 51	+ 13	+ 55	+ 34	+ 14	+ 40	+ 27	+ 10	+ 65	+ 37	+ 34	+ 45	+ 40	+ 23	+ 39	+ 31
8 51	+ 99	+126	+112	+103	+103	+103	+101	+135	+118	+119	+113	+116	+146	+125	+136
Range ..	245	348	343	335	327	331	340	326	331	380	327	352	472	411	442
Summer Range	2,171	2,054	2,103	2,220	1,994	2,109	2,285	2,096	2,187	2,564	2,091	2,330	3,218	2,508	2,865

Declination Magnetograph.

TABLE XIIIa.—*Showing the mean diurnal inequality of Declination for each month of the year 1911 and for the whole year.*

Unity=0·01 minute of arc.

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	+ 27	− 17	+104	+ 20	− 5	− 14	0	− 16	+ 9	− 16	− 45	− 37	+ 1
10 51	− 25	− 17	+ 68	− 81	−117	−125	−108	−139	−110	− 84	− 78	−118	− 78
11 51	− 59	− 43	− 13	−147	−207	−205	−174	−203	−208	−118	− 60	−114	−129
12 51	− 30	− 7	− 66	−151	−218	−200	−176	−207	−213	− 88	− 11	− 38	−117
13 51	+ 8	+ 24	− 59	−102	−161	−148	−134	−156	−146	− 27	+ 38	+ 31	− 69
14 51	+ 28	+ 39	− 9	− 41	− 78	− 81	− 78	− 87	− 50	+ 40	+ 63	+ 69	− 15
15 51	+ 46	+ 42	+ 13	+ 20	− 12	− 25	− 30	− 22	+ 17	+ 52	+ 60	+ 85	+ 20
16 51	+ 58	+ 44	+ 15	+ 29	+ 17	− 3	− 5	+ 14	+ 31	+ 26	+ 41	+ 52	+ 27
17 51	+ 37	+ 37	+ 6	+ 15	+ 6	− 7	− 9	+ 5	+ 10	+ 6	+ 30	+ 41	+ 15
18 51	+ 32	+ 39	− 7	− 12	− 20	− 35	− 28	− 12	+ 3	− 1	+ 30	+ 29	+ 1
19 51	+ 28	+ 35	− 19	− 21	− 28	− 42	− 36	− 20	− 5	− 5	+ 21	+ 30	− 5
20 51	+ 24	+ 35	− 13	− 23	− 16	− 33	− 35	− 17	+ 2	+ 1	+ 17	+ 20	− 3
21 51	+ 20	+ 26	− 6	− 12	− 9	− 20	− 24	− 10	+ 6	+ 8	+ 15	+ 5	0
22 51	+ 23	+ 29	− 2	− 5	+ 9	+ 3	+ 2	+ 1	+ 13	+ 13	+ 16	+ 4	+ 9
23 51	+ 26	+ 32	+ 5	+ 8	+ 21	+ 21	+ 15	+ 7	+ 24	+ 20	+ 16	+ 4	+ 17
0 51	+ 23	+ 20	+ 3	+ 15	+ 31	+ 36	+ 32	+ 20	+ 28	+ 21	+ 13	− 4	+ 20
1 51	+ 17	+ 19	− 4	+ 16	+ 38	+ 47	+ 41	+ 25	+ 24	+ 22	+ 2	− 10	+ 20
2 51	− 11	+ 1	− 15	+ 25	+ 36	+ 51	+ 48	+ 34	+ 25	+ 8	− 11	− 21	+ 14
3 51	− 21	− 14	− 23	+ 23	+ 32	+ 58	+ 52	+ 36	+ 15	− 7	− 20	− 29	+ 8
4 51	− 52	− 39	− 34	+ 17	+ 40	+ 68	+ 59	+ 49	+ 13	− 15	− 32	− 36	+ 3
5 51	− 75	− 50	− 42	+ 34	+112	+143	+118	+112	+ 47	− 15	− 36	− 37	+ 26
6 51	− 82	− 87	− 23	+115	+190	+194	+179	+206	+148	+ 34	− 37	− 13	+ 69
7 51	− 57	− 93	+ 36	+151	+203	+190	+183	+230	+195	+ 78	− 14	+ 41	+ 95
8 51	+ 13	− 51	+ 91	+112	+125	+117	+113	+145	+128	+ 56	− 14	+ 49	+ 74
Range ..	140	137	170	302	421	399	359	437	408	196	141	203	224
*Summed Range ..	822	840	676	1,195	1,731	1,866	1,679	1,773	1,470	761	720	917	835

TABLE XIIIb.—*Showing the mean diurnal inequality of Declination for each month of the year 1912 and for the whole-year.*

Unity=0.01 minute of arc.

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	0	− 23	+134	+ 54	− 26	+ 21	+ 31	− 13	− 26	+ 12	− 38	− 26	+ 8
10 51	− 97	− 89	+ 51	− 61	−140	−106	−104	−127	−146	− 53	− 78	− 19	− 81
11 51	−125	−137	− 58	−156	−206	−192	−188	−181	−227	−111	− 61	− 8	−137
12 51	− 65	−125	−122	−176	−217	−206	−201	−201	−217	− 97	+ 11	+ 11	−134
13 51	+ 11	− 58	−131	−130	−147	−162	−170	−158	−140	− 39	+ 42	+ 37	− 87
14 51	+ 72	+ 26	− 76	− 70	− 60	−108	−115	− 85	− 30	+ 17	+ 40	+ 31	− 30
15 51	+ 91	+ 71	− 13	− 9	+ 16	− 47	− 53	− 8	+ 47	+ 39	+ 27	+ 24	+ 15
16 51	+ 53	+ 70	+ 13	+ 23	+ 38	− 12	− 16	+ 33	+ 61	+ 21	+ 29	+ 30	+ 29
17 51	+ 29	+ 34	+ 8	+ 1	+ 15	− 2	− 10	+ 17	+ 27	+ 6	+ 32	+ 31	+ 16
18 51	+ 36	+ 30	− 2	− 25	− 27	− 26	− 29	− 10	− 2	− 3	+ 25	+ 26	− 1
19 51	+ 28	+ 20	− 9	− 31	− 34	− 35	− 33	− 23	− 10	+ 2	+ 20	+ 27	− 6
20 51	+ 15	+ 15	− 7	− 23	− 25	− 30	− 30	− 25	− 8	+ 5	+ 21	+ 23	− 6
21 51	+ 10	+ 12	− 1	− 6	− 8	− 13	− 14	− 14	+ 3	+ 9	+ 16	+ 20	+ 1
22 51	+ 6	+ 12	+ 1	+ 7	+ 9	+ 4	+ 7	− 3	+ 9	+ 15	+ 23	+ 19	+ 9
23 51	+ 4	+ 13	+ 7	+ 12	+ 22	+ 20	+ 24	+ 13	+ 13	+ 23	+ 24	+ 23	+ 16
0 51	+ 1	+ 13	+ 7	+ 19	+ 29	+ 33	+ 33	+ 19	+ 16	+ 24	+ 17	+ 20	+ 19
1 51	− 8	+ 13	+ 6	+ 22	+ 34	+ 39	+ 41	+ 27	+ 24	+ 14	+ 12	+ 10	+ 19
2 51	− 21	+ 9	− 2	+ 21	+ 33	+ 42	+ 46	+ 29	+ 32	+ 9	− 3	− 2	+ 16
3 51	− 24	+ 4	− 11	+ 12	+ 36	+ 41	+ 49	+ 35	+ 29	− 8	− 17	− 16	+ 11
4 51	− 35	+ 1	− 12	+ 14	+ 50	+ 52	+ 59	+ 50	+ 28	− 22	− 31	− 33	+ 10
5 51	− 38	+ 3	− 12	+ 47	+120	+116	+128	+106	+ 60	− 26	− 35	− 38	+ 36
6 51	− 19	+ 9	+ 10	+140	+183	+196	+195	+194	+163	+ 21	− 50	− 79	+ 80
7 51	+ 21	+ 33	+ 82	+179	+189	+218	+210	+205	+189	+ 80	− 22	− 76	+109
8 51	+ 54	+ 39	+138	+139	+111	+150	+143	+114	+ 98	+ 71	− 6	− 40	+ 84
Range ..	216	208	269	355	406	424	411	406	416	191	120	116	246
*Summed Range ..	863	859	913	1,377	1,775	1,871	1,929	1,690	1,605	727	680	669	960

*Summed range means sum without regard to sign of the twenty-four ordinates of the diurnal inequality.

For the magnitude of the aperiodic corrections applicable to the diurnal inequalities, *vide* Table XIX.

Declination Magnetograph.

TABLE XIIIc.—*Showing the mean diurnal inequality of Declination for each month of the year 1913 and for the whole year.*

Unity=0·01 minute of arc.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	+ 69	+ 34	+ 67	+ 62	− 23	− 28	+ 27	− 34	− 5	− 2	− 27	− 32	+ 9
10 51	+ 1	+ 24	+ 19	− 46	−151	−136	− 84	−150	−135	− 98	− 58	− 32	− 70
11 51	− 48	− 9	− 69	−145	−211	−211	−178	−217	−235	−144	− 48	− 31	−129
12 51	− 34	+ 4	−118	−166	−215	−218	−207	−213	−237	−112	− 3	− 1	−127
13 51	− 15	+ 20	− 78	−128	−146	−160	−168	−159	−154	− 51	+ 40	+ 52	− 79
14 51	+ 3	+ 21	− 8	− 69	− 58	− 91	−104	− 82	− 46	+ 4	+ 37	+ 74	− 27
15 51	+ 32	+ 14	+ 29	− 4	+ 10	− 22	− 47	− 7	+ 39	+ 43	+ 25	+ 66	+ 15
16 51	+ 42	+ 9	+ 23	+ 19	+ 36	+ 14	− 10	+ 37	+ 62	+ 38	+ 13	+ 45	+ 29
17 51	+ 21	+ 1	0	− 5	+ 15	+ 8	+ 4	+ 27	+ 30	+ 8	+ 19	+ 35	+ 14
18 51	+ 28	+ 13	− 7	− 22	− 23	− 33	− 24	− 17	+ 3	+ 2	+ 16	+ 27	− 3
19 51	+ 24	+ 6	− 11	− 32	− 30	− 39	− 33	− 24	− 7	+ 3	+ 14	+ 25	− 9
20 51	+ 15	+ 4	− 4	− 15	− 26	− 29	− 27	− 24	− 8	+ 5	+ 20	+ 22	− 6
21 51	+ 9	+ 9	− 1	− 3	− 10	− 11	− 12	− 13	0	+ 12	+ 21	+ 17	+ 1
22 51	+ 9	+ 8	+ 5	+ 8	+ 7	+ 5	0	+ 2	+ 7	+ 19	+ 24	+ 22	+ 10
23 51	+ 8	+ 11	+ 9	+ 19	+ 17	+ 17	+ 15	+ 13	+ 14	+ 27	+ 27	+ 24	+ 17
0 51	+ 5	+ 10	+ 12	+ 21	+ 29	+ 35	+ 28	+ 22	+ 26	+ 26	+ 22	+ 19	+ 21
1 51	− 7	+ 5	+ 9	+ 19	+ 33	+ 40	+ 36	+ 28	+ 25	+ 19	+ 13	+ 8	+ 19
2 51	− 12	+ 2	+ 2	+ 14	+ 36	+ 46	+ 41	+ 35	+ 23	+ 10	+ 1	− 1	+ 16
3 51	− 25	− 15	− 8	+ 2	+ 34	+ 51	+ 41	+ 40	+ 19	0	− 10	− 20	+ 9
4 51	− 43	− 32	− 17	− 1	+ 43	+ 72	+ 56	+ 53	+ 26	− 10	− 24	− 34	+ 7
5 51	− 57	− 43	− 15	+ 30	+116	+136	+123	+123	+ 69	− 9	− 37	− 50	+ 32
6 51	− 69	− 66	+ 6	+135	+195	+220	+188	+216	+168	+ 36	− 53	− 90	+ 74
7 51	− 16	− 40	+ 69	+179	+200	+216	+197	+223	+204	+ 90	− 24	− 86	+101
8 51	+ 70	+ 7	+ 90	+143	+117	+118	+136	+113	+117	+ 73	− 11	− 52	+ 77
Range ..	139	100	208	345	415	438	404	440	441	234	98	164	230
Summed Range ..	662	407	676	1,287	1,781	1,956	1,786	1,872	1,659	841	587	865	901

TABLE XIIId.—*Showing the mean diurnal inequality of Declination for each month of the year 1914 and for the whole year.*

Unity=0·01 minute of arc.

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	− 27	− 54	+ 86	+ 75	+ 24	+ 7	+ 22	− 19	− 29	+ 20	− 3	+ 42	+ 12
10 51	− 72	− 94	+ 26	− 46	−106	−113	−108	−163	−191	− 80	− 48	+ 39	− 80
11 51	− 68	−108	− 74	−148	−192	−209	−199	−261	−278	−154	− 61	+ 27	−144
12 51	− 8	− 59	−128	−180	−212	−228	−226	−270	−261	−131	− 19	+ 22	−142
13 51	+ 57	+ 19	−112	−141	−162	−175	−191	−207	−160	− 49	+ 21	+ 21	− 90
14 51	+ 87	+ 70	− 49	− 69	− 94	−104	−137	−103	− 34	+ 41	+ 30	0	− 30
15 51	+ 91	+ 96	+ 9	− 11	− 30	− 35	− 61	− 5	+ 52	+ 74	+ 36	− 3	+ 18
16 51	+ 38	+ 66	+ 24	+ 11	+ 11	− 4	− 15	+ 56	+ 59	+ 49	+ 34	+ 9	+ 28
17 51	+ 11	+ 14	+ 6	− 6	+ 12	− 5	0	+ 48	+ 11	+ 9	+ 35	+ 9	+ 12
18 51	+ 19	+ 15	0	− 26	− 20	− 26	− 16	− 11	− 6	+ 1	+ 24	+ 15	− 3
19 51	+ 16	+ 12	− 8	− 32	− 31	− 29	− 22	− 21	− 13	− 6	+ 23	+ 15	− 8
20 51	+ 15	+ 14	− 6	− 12	− 23	− 24	− 20	− 21	− 5	− 1	+ 17	+ 17	− 4
21 51	+ 15	+ 7	− 1	+ 1	− 6	− 7	− 10	− 4	0	+ 1	+ 15	+ 20	+ 3
22 51	+ 15	+ 8	+ 6	+ 15	+ 13	+ 8	+ 2	+ 5	+ 9	+ 8	+ 20	+ 16	+ 10
23 51	+ 16	+ 11	+ 11	+ 25	+ 23	+ 28	+ 17	+ 12	+ 9	+ 10	+ 23	+ 26	+ 18
0 51	+ 10	+ 15	+ 9	+ 26	+ 32	+ 38	+ 30	+ 15	+ 9	+ 3	+ 19	+ 17	+ 19
1 51	+ 3	+ 15	+ 7	+ 25	+ 30	+ 49	+ 38	+ 24	+ 16	0	+ 5	+ 7	+ 18
2 51	− 9	+ 12	+ 1	+ 16	+ 30	+ 51	+ 42	+ 32	+ 21	− 6	− 3	− 7	+ 15
3 51	− 14	+ 9	0	+ 14	+ 28	+ 47	+ 46	+ 36	+ 27	− 13	− 24	− 23	+ 11
4 51	− 28	− 3	− 5	+ 10	+ 34	+ 58	+ 59	+ 61	+ 44	− 13	− 36	− 41	+ 12
5 51	− 42	− 12	− 1	+ 21	+ 93	+118	+139	+145	+109	− 7	− 48	− 59	+ 38
6 51	− 56	− 10	+ 21	+112	+180	+194	+213	+240	+221	+ 44	− 57	− 99	+ 84
7 51	− 46	− 21	+ 81	+168	+211	+209	+227	+255	+252	+106	− 19	− 75	+112
8 51	− 15	− 30	+103	+152	+153	+146	+159	+152	+150	+106	+ 7	+ 2	+ 90
Range ..	163	204	231	348	423	437	453	525	530	260	97	141	256
Summed Range ..	778	774	774	1,342	1,750	1,912	1,999	2,166	1,966	932	627	611	1,001

Declination Magnetograph.

TABLE XIIIe.—*Showing the mean diurnal inequality of Declination for each month of the year 1915 and for the whole year.*

Unity=0·01 minute of arc.

1915. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
9 51	+ 42	− 67	+ 85	+107	− 56	+ 16	− 2	− 31	− 31	− 13	− 85	+ 12	− 2
10 51	− 58	−127	− 10	− 46	−176	−113	−168	−176	−161	− 89	−147	− 65	−111
11 51	− 85	−160	−107	−203	−236	−220	−262	−253	−260	−152	−134	− 91	−180
12 51	− 37	−116	−172	−262	−222	−262	−272	−266	−290	−132	− 58	− 51	−178
13 51	+ 11	− 33	−150	−203	−145	−218	−221	−203	−206	− 57	+ 30	− 12	−117
14 51	+ 36	+ 49	− 52	− 93	− 53	−146	−145	−108	− 78	+ 22	+ 74	+ 21	− 41
15 51	+ 53	+ 90	+ 28	+ 3	+ 16	− 60	− 49	− 17	+ 23	+ 64	+ 71	+ 49	+ 23
16 51	+ 26	+ 61	+ 44	+ 21	+ 41	− 4	+ 13	+ 36	+ 61	+ 40	+ 46	+ 28	+ 34
17 51	− 1	+ 21	+ 12	+ 8	+ 19	+ 13	+ 44	+ 49	+ 39	− 2	+ 36	+ 19	+ 21
18 51	+ 24	+ 26	− 6	− 27	− 22	− 4	+ 5	+ 9	0	+ 8	+ 42	+ 34	+ 7
19 51	+ 19	+ 26	− 6	− 36	− 30	− 26	− 20	− 15	− 3	+ 10	+ 32	+ 29	− 2
20 51	+ 16	+ 26	+ 7	− 24	− 21	− 12	− 23	− 25	− 1	+ 10	+ 23	+ 16	− 1
21 51	+ 19	+ 27	+ 14	− 2	− 2	+ 1	− 8	− 14	+ 3	+ 21	+ 22	+ 11	+ 8
22 51	+ 20	+ 28	+ 22	+ 16	+ 12	+ 11	+ 3	− 7	+ 6	+ 26	+ 32	+ 23	+ 16
23 51	+ 20	+ 28	+ 20	+ 24	+ 32	+ 28	+ 14	+ 9	+ 14	+ 30	+ 40	+ 17	+ 23
0 51	+ 19	+ 26	+ 23	+ 25	+ 41	+ 38	+ 32	+ 13	+ 15	+ 31	+ 38	+ 6	+ 26
1 51	+ 12	+ 21	+ 13	+ 35	+ 46	+ 46	+ 38	+ 24	+ 21	+ 25	+ 29	+ 3	+ 26
2 51	+ 2	+ 16	− 1	+ 33	+ 43	+ 49	+ 46	+ 32	+ 21	+ 15	+ 6	− 8	+ 21
3 51	− 16	+ 5	− 3	+ 25	+ 40	+ 51	+ 44	+ 46	+ 28	+ 3	− 13	− 23	+ 16
4 51	− 35	− 8	− 10	+ 17	+ 53	+ 63	+ 63	+ 63	+ 37	− 12	− 25	− 31	+ 14
5 51	− 52	− 1	− 7	+ 49	+117	+138	+173	+151	+110	− 13	− 27	− 35	+ 50
6 51	− 67	+ 21	+ 29	+141	+198	+221	+274	+262	+247	+ 38	− 15	− 33	+110
7 51	− 17	+ 40	+108	+198	+193	+228	+260	+268	+268	+ 84	+ 8	+ 21	+138
8 51	+ 63	+ 14	+126	+186	+103	+152	+158	+145	+138	+ 57	− 22	+ 57	+ 98
Range ..	148	250	298	460	434	490	546	534	558	236	221	148	318
Summed Range ..	750	1,037	1,055	1,784	1,917	2,120	2,337	2,222	2,061	955	1,055	695	1,263

TABLE XIIIf.—*Showing for the summer months (April to September), the winter months (January to March and October to December) and the whole year, the mean diurnal inequality of Declination during the period 1911 to 1915.*

Unity=0·01 minute of arc.

Years.. Bombay Civil Time. H. m.	1911. April to September.	1911. January to March and October to December.	1911. Year.	1912. April to September.	1912. January to March and October to December.	1912. Year.	1913. April to September.	1913. January to March and October to December.	1913. Year.	1914. April to September.	1914. January to March and October to December.	1914. Year.	1915. April to September.	1915. January to March and October to December.	1915. Year.
9 51	− 1	+ 3	+ 1	+ 7	+ 10	+ 8	0	+ 18	+ 9	+ 13	+ 11	+ 12	0	− 4	− 2
10 51	−113	− 42	− 78	−114	− 47	− 81	−117	− 24	− 70	−121	− 38	− 80	−140	− 83	−111
11 51	−191	− 68	−129	−192	− 83	−137	−199	− 58	−129	−214	− 73	−144	−239	−121	−180
12 51	−194	− 40	−117	−203	− 64	−134	−209	− 44	−127	−229	− 54	−142	−262	− 94	−178
13 51	−141	+ 2	− 69	−151	− 23	− 87	−152	− 5	− 79	−173	− 7	− 90	−199	− 35	−117
14 51	− 69	+ 38	− 15	− 78	+ 18	− 30	− 75	+ 22	− 27	− 90	+ 30	− 30	−104	+ 22	− 41
15 51	− 9	+ 50	+ 20	− 9	+ 40	+ 15	− 5	+ 35	+ 15	− 15	+ 50	+ 18	− 14	+ 59	+ 23
16 51	+ 14	+ 39	+ 27	+ 26	+ 36	+ 29	+ 26	+ 32	+ 29	+ 20	+ 37	+ 28	+ 28	+ 41	+ 34
17 51	+ 3	+ 26	+ 15	+ 8	+ 23	+ 16	+ 13	+ 14	+ 14	+ 10	+ 14	+ 12	+ 29	+ 14	+ 21
18 51	− 17	+ 20	+ 1	− 20	+ 19	− 1	− 19	+ 13	− 3	− 17	+ 12	− 3	− 6	+ 21	+ 7
19 51	− 25	+ 15	− 5	− 28	+ 15	− 6	− 27	+ 10	− 9	− 25	+ 9	− 8	− 22	+ 18	− 2
20 51	− 20	+ 14	− 3	− 23	+ 12	− 6	− 21	+ 10	− 6	− 17	+ 9	− 4	− 18	+ 16	− 1
21 51	− 11	+ 11	0	− 9	+ 11	+ 1	− 8	+ 11	+ 1	− 4	+ 9	+ 3	− 4	+ 19	+ 8
22 51	+ 4	+ 14	+ 9	+ 5	+ 13	+ 9	+ 5	+ 14	+ 10	+ 9	+ 12	+ 10	+ 7	+ 25	+ 16
23 51	+ 16	+ 17	+ 17	+ 17	+ 16	+ 16	+ 16	+ 18	+ 17	+ 19	+ 16	+ 18	+ 20	+ 26	+ 23
0 51	+ 27	+ 13	+ 20	+ 25	+ 14	+ 19	+ 27	+ 16	+ 21	+ 25	+ 12	+ 19	+ 27	+ 24	+ 26
1 51	+ 32	+ 8	+ 20	+ 31	+ 8	+ 19	+ 30	+ 8	+ 19	+ 30	+ 6	+ 18	+ 35	+ 17	+ 26
2 51	+ 36	− 8	+ 14	+ 34	− 2	+ 16	+ 32	0	+ 16	+ 32	− 2	+ 15	+ 37	+ 5	+ 21
3 51	+ 36	− 19	+ 8	+ 34	− 12	+ 11	+ 31	− 13	+ 9	+ 33	− 11	+ 11	+ 39	− 8	+ 16
4 51	+ 41	− 35	+ 3	+ 42	− 22	+ 10	+ 41	− 27	+ 7	+ 44	− 21	+ 12	+ 49	− 20	+ 14
5 51	+ 94	− 42	+ 26	+ 96	− 24	+ 36	+ 99	− 35	+ 32	+104	− 28	+ 38	+123	− 22	+ 50
6 51	+172	− 35	+ 69	+178	− 18	+ 80	+187	− 39	+ 74	+193	− 26	+ 84	+224	− 4	+110
7 51	+192	− 1	+ 95	+198	+ 20	+109	+203	+ 1	+101	+220	+ 4	+112	+236	+ 41	+138
8 51	+123	+ 24	+ 74	+126	+ 43	+ 84	+124	+ 29	+ 77	+152	+ 29	+ 90	+147	+ 49	+ 98
Range ..	386	118	224	401	126	246	412	93	230	449	123	256	498	180	318
Summed Range ..	1,581	584	835	1,648	594	960	1,666	496	901	1,809	520	1,001	2,009	788	1,263

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Vertical Force Magnetograph.

TABLE XIV*a*.—*Showing the mean diurnal inequality of Vertical Force for each month of the year 1911, and for the whole year.*

Unity=0·1γ

1911. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
9 50	− 45	+ 40	− 16	−125	−168	−181	−127	−191	−164	−134	− 84	−147	−112
10 50	− 86	+ 18	− 58	−149	−186	−200	−146	−200	−206	−155	− 73	−139	−132
11 50	− 81	+ 20	− 86	−128	−167	−160	−124	−154	−189	−119	− 20	− 56	−105
12 50	− 19	+ 55	− 75	− 64	− 88	− 77	− 68	− 82	− 97	− 38	+ 43	+ 20	− 41
13 50	+ 7	+ 45	− 11	− 7	− 7	− 11	− 10	− 8	− 6	+ 18	+ 61	+ 57	+ 11
14 50	+ 24	+ 32	+ 20	+ 31	+ 39	+ 39	+ 27	+ 34	+ 50	+ 46	+ 50	+ 70	+ 38
15 50	+ 32	+ 29	+ 12	+ 47	+ 52	+ 47	+ 36	+ 52	+ 60	+ 24	+ 27	+ 60	+ 40
16 50	+ 26	+ 19	+ 1	+ 19	+ 36	+ 37	+ 28	+ 38	+ 31	− 10	0	+ 20	+ 20
17 50	+ 10	+ 10	− 6	− 3	+ 3	+ 19	+ 11	+ 12	+ 3	− 7	+ 7	+ 27	+ 7
18 50	+ 10	+ 6	− 10	− 3	+ 2	+ 4	− 3	+ 9	+ 13	+ 3	+ 11	+ 23	+ 5
19 50	+ 13	+ 4	− 5	+ 2	+ 14	+ 12	+ 4	+ 11	+ 14	+ 13	+ 7	+ 21	+ 9
20 50	+ 6	− 2	+ 8	+ 15	+ 31	+ 26	+ 13	+ 21	+ 26	+ 21	+ 6	+ 11	+ 15
21 50	+ 6	− 10	+ 18	+ 28	+ 39	+ 36	+ 29	+ 33	+ 35	+ 29	+ 8	+ 8	+ 22
22 50	+ 7	− 9	+ 21	+ 33	+ 49	+ 45	+ 38	+ 37	+ 45	+ 34	+ 7	+ 7	+ 26
23 50	+ 8	− 10	+ 20	+ 36	+ 46	+ 47	+ 38	+ 40	+ 48	+ 36	+ 6	+ 3	+ 26
0 50	+ 3	− 19	+ 14	+ 34	+ 45	+ 47	+ 39	+ 40	+ 47	+ 34	+ 3	0	+ 24
1 50	+ 3	− 24	+ 12	+ 29	+ 40	+ 45	+ 34	+ 41	+ 41	+ 34	− 2	− 5	+ 21
2 50	− 8	− 32	+ 4	+ 28	+ 35	+ 40	+ 33	+ 38	+ 40	+ 30	− 7	− 9	+ 16
3 50	− 5	− 36	0	+ 28	+ 35	+ 39	+ 30	+ 35	+ 35	+ 25	− 6	− 8	+ 14
4 50	− 9	− 40	+ 1	+ 30	+ 48	+ 52	+ 35	+ 46	+ 39	+ 28	− 7	− 5	+ 18
5 50	− 3	− 38	+ 4	+ 55	+ 98	+100	+ 81	+ 97	+ 76	+ 40	− 1	+ 7	+ 43
6 50	+ 2	− 55	+ 31	+ 87	+ 83	+ 78	+ 73	+107	+114	+ 71	+ 2	+ 27	+ 52
7 50	+ 42	− 19	+ 52	+ 28	+ 9	+ 10	+ 5	+ 35	+ 33	+ 34	− 6	+ 35	+ 21
8 50	+ 49	+ 10	+ 40	− 50	− 87	− 86	− 73	− 86	− 90	− 51	− 37	− 36	− 41
Range ..	135	110	138	236	284	300	227	307	320	226	145	217	184
*Summed Range ..	504	582	525	1,059	1,407	1,438	1,105	1,447	1,502	1,034	481	801	859

TABLE XIV*b*.—*Showing the mean diurnal inequality of Vertical Force for each month of the year 1912 and for the whole year.*

Unity=0·1γ

1912. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
9 50	− 98	− 87	− 40	−120	−155	−164	−143	−171	−192	−118	− 42	+ 19	−109
10 50	−113	−109	−127	−169	−163	−201	−180	−187	−219	−148	− 49	+ 17	−137
11 50	− 53	− 83	−165	−161	−138	−172	−153	−146	−189	−136	− 1	+ 4	−116
12 50	+ 41	− 14	−127	− 85	− 79	− 99	− 81	− 89	− 97	− 62	+ 31	+ 4	− 55
13 50	+100	+ 53	− 54	− 12	− 9	− 24	− 25	− 16	− 5	0	+ 8	+ 9	+ 2
14 50	+104	+ 79	+ 22	+ 25	+ 38	+ 32	+ 18	+ 29	+ 62	+ 25	− 6	− 5	+ 35
15 50	+ 70	+ 64	+ 39	+ 45	+ 63	+ 62	+ 49	+ 55	+ 65	+ 19	− 7	+ 8	+ 44
16 50	+ 13	+ 19	+ 31	+ 30	+ 39	+ 53	+ 42	+ 41	+ 25	− 5	+ 6	+ 20	+ 26
17 50	+ 15	− 6	+ 11	+ 3	+ 5	+ 29	+ 20	+ 6	− 1	+ 4	+ 5	+ 17	+ 9
18 50	+ 19	+ 6	+ 7	0	− 3	+ 8	− 3	+ 4	+ 7	+ 6	+ 2	+ 8	+ 5
19 50	+ 12	+ 2	+ 14	+ 10	+ 8	+ 13	+ 6	+ 11	+ 21	+ 15	+ 5	+ 8	+ 10
20 50	+ 3	+ 2	+ 20	+ 25	+ 18	+ 24	+ 15	+ 22	+ 34	+ 23	+ 5	+ 1	+ 16
21 50	0	+ 3	+ 26	+ 36	+ 31	+ 39	+ 27	+ 35	+ 39	+ 29	+ 7	− 1	+ 23
22 50	− 3	+ 5	+ 28	+ 41	+ 37	+ 41	+ 38	+ 41	+ 48	+ 37	+ 13	0	+ 27
23 50	− 7	+ 6	+ 27	+ 39	+ 36	+ 43	+ 37	+ 45	+ 51	+ 37	+ 8	− 1	+ 27
0 50	− 12	+ 6	+ 25	+ 37	+ 33	+ 40	+ 36	+ 42	+ 50	+ 34	+ 1	− 8	+ 24
1 50	− 20	+ 6	+ 20	+ 32	+ 29	+ 37	+ 33	+ 41	+ 55	+ 30	− 2	− 14	+ 21
2 50	− 24	+ 3	+ 17	+ 30	+ 27	+ 32	+ 31	+ 40	+ 51	+ 27	− 7	− 19	+ 17
3 50	− 20	+ 4	+ 15	+ 27	+ 30	+ 28	+ 28	+ 43	+ 49	+ 22	− 10	− 21	+ 16
4 50	− 22	+ 6	+ 18	+ 32	+ 42	+ 41	+ 38	+ 51	+ 52	+ 26	− 7	− 24	+ 21
5 50	− 16	+ 12	+ 26	+ 62	+ 92	+ 89	+ 88	+ 97	+ 94	+ 37	− 5	− 18	+ 46
6 50	+ 5	+ 21	+ 56	+ 92	+ 83	+ 93	+ 83	+ 98	+114	+ 77	+ 8	− 41	+ 57
7 50	+ 14	+ 25	+ 73	+ 29	+ 11	+ 35	+ 41	+ 13	0	+ 52	+ 24	+ 4	+ 27
8 50	− 15	− 14	+ 47	− 50	− 78	− 73	− 51	− 95	−120	− 26	+ 5	+ 23	− 37
Range ..	217	188	238	261	255	294	268	285	333	225	80	64	194
Summed Range ..	799	635	1,035	1,192	1,247	1,472	1,266	1,418	1,640	995	265	294	907

*Summed range means sum without regard to sign of the twenty-four ordinates of the diurnal inequality.

For the magnitude of the temperature and aperiodic corrections applicable to the diurnal inequalities, *vide* Tables XVII and XX.

Vertical Force Magnetograph.

TABLE XIVc.—*Showing the mean diurnal inequality of Vertical Force for each month of the year 1913 and for the whole year.*

Unity = 0.1γ

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	− 44	− 3	− 35	−155	−205	−133	−116	−168	−192	−146	− 41	+ 6	−103
10 51	−114	− 27	− 74	−185	−203	−149	−159	−180	−234	−168	− 48	+ 1	−128
11 51	−101	− 40	−106	−162	−160	−142	−153	−141	−183	−109	− 7	− 1	−109
12 51	− 46	− 15	− 63	− 72	− 83	− 74	− 90	− 77	− 76	− 26	+ 45	+ 33	− 45
13 51	− 8	− 8	+ 4	− 7	0	− 6	− 31	− 12	+ 21	+ 28	+ 42	+ 55	+ 6
14 51	+ 22	− 15	+ 38	+ 44	+ 53	+ 38	+ 28	+ 36	+ 69	+ 46	+ 21	+ 38	+ 35
15 51	+ 41	− 11	+ 24	+ 58	+ 68	+ 63	+ 51	+ 61	+ 78	+ 41	+ 14	+ 17	+ 42
16 51	+ 36	− 10	− 2	+ 38	+ 45	+ 46	+ 46	+ 49	+ 35	+ 8	+ 12	+ 4	+ 26
17 51	+ 22	+ 1	− 5	+ 9	+ 13	+ 12	+ 19	+ 6	− 3	0	+ 16	+ 8	+ 8
18 51	+ 28	+ 7	− 4	+ 6	+ 5	− 10	− 7	− 2	+ 5	+ 8	+ 13	+ 6	+ 5
19 51	+ 23	+ 6	+ 4	+ 10	+ 13	+ 6	+ 5	+ 7	+ 14	+ 15	+ 11	+ 3	+ 10
20 51	+ 21	+ 8	+ 14	+ 30	+ 24	+ 18	+ 14	+ 16	+ 27	+ 20	+ 6	+ 1	+ 17
21 51	+ 18	+ 9	+ 16	+ 37	+ 38	+ 26	+ 26	+ 29	+ 36	+ 23	+ 2	0	+ 22
22 51	+ 16	+ 13	+ 23	+ 43	+ 46	+ 32	+ 31	+ 36	+ 40	+ 28	+ 4	+ 1	+ 26
23 51	+ 13	+ 14	+ 21	+ 45	+ 46	+ 33	+ 31	+ 37	+ 43	+ 27	0	− 5	+ 25
0 51	+ 7	+ 8	+ 20	+ 39	+ 45	+ 35	+ 33	+ 38	+ 43	+ 24	− 6	− 8	+ 23
1 51	+ 2	+ 5	+ 14	+ 36	+ 43	+ 31	+ 31	+ 36	+ 43	+ 23	− 11	− 15	+ 20
2 51	0	+ 2	+ 8	+ 32	+ 40	+ 29	+ 28	+ 38	+ 41	+ 17	− 14	− 20	+ 17
3 51	− 4	− 7	+ 4	+ 27	+ 38	+ 28	+ 27	+ 37	+ 39	+ 19	− 14	− 22	+ 14
4 51	− 7	− 7	+ 5	+ 36	+ 53	+ 45	+ 39	+ 49	+ 47	+ 24	− 13	− 23	+ 21
5 51	− 7	− 5	+ 13	+ 74	+103	+ 92	+ 83	+100	+ 90	+ 39	− 17	− 22	+ 45
6 51	− 2	− 4	+ 44	+ 95	+ 86	+ 74	+ 76	+100	+110	+ 70	− 11	− 52	+ 49
7 51	+ 46	+ 29	+ 44	+ 12	+ 2	+ 9	+ 34	+ 12	+ 14	+ 32	+ 4	− 18	+ 18
8 51	+ 45	+ 44	+ 2	− 80	−105	− 94	− 54	−104	−108	− 41	− 17	+ 11	− 42
Range ..	160	84	150	280	308	241	242	280	344	238	93	107	177
Summed Range ..	673	298	587	1,332	1,517	1,225	1,212	1,371	1,591	982	389	370	856

TABLE XIVd.—*Showing the mean diurnal inequality of Vertical Force for each month of the year 1914 and for the whole year.*

Unity = 0.1γ

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	− 51	− 92	− 46	−137	−194	−123	−137	−212	−256	−159	− 57	+ 49	−118
10 51	− 57	− 98	−105	−184	−216	−159	−175	−227	−256	−182	− 79	− 1	−145
11 51	− 6	− 48	−141	−170	−184	−150	−163	−192	−188	−142	− 53	− 25	−122
12 51	+ 51	+ 34	− 99	− 93	−113	− 87	−113	− 93	− 72	− 37	+ 3	− 42	− 55
13 51	+ 74	+ 85	− 26	− 14	− 37	− 13	− 41	− 15	+ 25	+ 42	+ 18	− 37	+ 5
14 51	+ 69	+ 81	+ 26	+ 41	+ 17	+ 31	+ 18	+ 54	+ 90	+ 68	+ 15	− 33	+ 40
15 51	+ 43	+ 56	+ 34	+ 47	+ 51	+ 57	+ 57	+ 90	+ 94	+ 38	+ 17	− 1	+ 49
16 51	− 6	+ 6	+ 14	+ 32	+ 45	+ 38	+ 53	+ 80	+ 41	− 8	+ 9	+ 18	+ 27
17 51	+ 6	− 13	+ 11	+ 5	+ 24	+ 17	+ 28	+ 21	− 6	− 10	+ 12	+ 19	+ 9
18 51	+ 15	+ 11	+ 9	+ 6	+ 5	+ 4	+ 1	− 7	− 21	− 2	+ 8	+ 20	+ 4
19 51	+ 9	+ 9	+ 10	+ 14	+ 12	+ 12	+ 14	+ 9	+ 21	+ 8	+ 12	+ 17	+ 12
20 51	+ 7	+ 12	+ 19	+ 33	+ 26	+ 21	+ 22	+ 22	+ 35	+ 18	+ 13	+ 13	+ 20
21 51	+ 2	+ 7	+ 23	+ 36	+ 42	+ 30	+ 29	+ 29	+ 37	+ 21	+ 13	+ 7	+ 23
22 51	− 1	+ 12	+ 30	+ 43	+ 50	+ 34	+ 38	+ 36	+ 46	+ 30	+ 14	+ 7	+ 28
23 51	− 4	+ 11	+ 30	+ 45	+ 48	+ 36	+ 39	+ 38	+ 48	+ 29	+ 10	+ 5	+ 28
0 51	− 8	+ 8	+ 24	+ 42	+ 45	+ 34	+ 41	+ 37	+ 45	+ 23	+ 3	− 5	+ 24
1 51	− 16	+ 4	+ 19	+ 35	+ 42	+ 31	+ 38	+ 37	+ 51	+ 23	0	− 10	+ 21
2 51	− 20	+ 2	+ 17	+ 33	+ 40	+ 26	+ 34	+ 37	+ 50	+ 23	− 1	− 15	+ 19
3 51	− 19	0	+ 17	+ 30	+ 40	+ 20	+ 33	+ 41	+ 51	+ 23	− 4	− 18	+ 18
4 51	− 22	− 7	+ 20	+ 29	+ 52	+ 32	+ 44	+ 58	+ 65	+ 29	0	− 18	+ 23
5 51	− 22	− 6	+ 27	+ 57	+104	+ 81	+ 98	+115	+112	+ 43	+ 4	− 16	+ 50
6 51	− 25	− 2	+ 53	+ 95	+107	+ 84	+ 85	+115	+124	+ 94	+ 18	− 25	+ 60
7 51	− 13	− 29	+ 44	+ 37	+ 46	+ 28	+ 24	+ 30	+ 8	+ 67	+ 28	+ 34	+ 25
8 51	− 9	− 53	0	− 52	− 53	− 72	− 73	−110	−147	− 31	0	+ 67	− 44
Range ..	131	183	194	279	323	243	273	342	380	276	107	109	205
Summed Range ..	555	686	844	1,310	1,593	1,220	1,398	1,705	1,889	1,150	391	502	969

Vertical Force Magnetograph.

TABLE XIVe.—*Showing the mean diurnal inequality of Vertical Force for each month of the year 1915 and for the whole year.*

Unity=0.1γ

1915. Bombay Civil Time. H. m.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
9 51	−95	−123	−76	−179	−203	−178	−176	−201	−283	−149	−95	−77	−153
10 51	−136	−124	−146	−251	−197	−205	−202	−194	−286	−175	−93	−116	−177
11 51	−66	−85	−163	−247	−147	−190	−157	−151	−247	−145	−20	−86	−142
12 51	+10	+4	−127	−150	−64	−124	−93	−83	−136	−51	+49	−21	−65
13 51	+24	+67	−34	−21	+14	−27	−17	−20	0	+21	+67	+8	+7
14 51	+34	+85	+46	+65	+54	+36	+50	+34	+76	+44	+47	+31	+50
15 51	+28	+66	+49	+75	+63	+74	+90	+59	+87	+30	+16	+31	+56
16 51	−1	+6	+9	+32	+34	+56	+84	+57	+43	−21	−19	−1	+23
17 51	+4	−8	−18	+2	−7	+39	+55	+26	+7	−24	+1	+9	+7
18 51	+22	+8	−4	−7	−19	+7	−2	−7	+10	+1	+6	+21	+3
19 51	+16	+11	+11	+15	+4	+13	+2	−1	+31	+10	+5	+15	+11
20 51	+15	+13	+22	+38	+20	+34	+16	+18	+39	+18	+5	+11	+21
21 51	+16	+18	+29	+50	+37	+39	+30	+31	+53	+35	+15	+21	+31
22 51	+18	+22	+38	+60	+47	+46	+35	+41	+62	+45	+22	+24	+38
23 51	+15	+18	+40	+59	+49	+50	+36	+45	+68	+48	+15	+16	+38
0 51	+12	+15	+37	+61	+50	+43	+36	+47	+68	+43	+12	+7	+36
1 51	+6	+10	+31	+60	+48	+39	+32	+46	+66	+41	+4	+5	+32
2 51	+2	+10	+26	+55	+40	+37	+31	+46	+67	+36	−1	+3	+29
3 51	−1	+4	+24	+54	+44	+35	+29	+47	+70	+33	−2	+1	+28
4 51	−2	+5	+29	+57	+62	+46	+44	+55	+74	+33	+2	+4	+34
5 51	−1	+20	+39	+97	+105	+99	+109	+119	+144	+55	+12	+16	+68
6 51	+4	+28	+73	+108	+89	+91	+84	+110	+145	+92	+21	+28	+73
7 51	+45	+5	+70	+36	−5	+22	+1	+3	0	+38	−4	+42	+21
8 51	+29	−63	+3	−67	−110	−82	−108	−124	−167	−53	−55	−1	−66
Range ..	181	209	236	359	308	304	311	320	431	267	162	158	250
Summed Range ..	602	818	1,144	1,846	1,512	1,612	1,519	1,565	2,229	1,241	588	595	1,209

TABLE XIVf.—*Showing for the summer months (April to September), the winter months (January to March and October to December) and the whole year, the mean diurnal inequality of Vertical Force during the period 1911—1915.*

Unity=0.1γ

Years. Bombay Civil Time. H. m.	1911. April to September.	1911. January to March and October to December.	1911. Year.	1912. April to September.	1912. January to March and October to December.	1912. Year.	1913. April to September.	1913. January to March and October to December.	1913. Year.	1914. April to September.	1914. January to March and October to December.	1914. Year.	1915. April to September.	1915. January to March and October to December.	1915. Year.
9 51	−159	−64	−112	−157	−61	−109	−161	−44	−103	−176	−59	−118	−203	−102	−153
10 51	−181	−82	−132	−186	−88	−137	−185	−72	−128	−203	−87	−145	−222	−132	−177
11 51	−154	−57	−105	−160	−72	−116	−157	−61	−109	−174	−69	−122	−190	−94	−142
12 51	−79	−2	−41	−88	−21	−55	−79	−12	−45	−95	−15	−55	−108	−23	−65
13 51	−8	−29	+11	−15	+19	+2	−6	+19	+6	−16	+26	+5	−12	+25	+7
14 51	+37	+40	+38	+34	+36	+35	+45	+25	+35	+42	+38	+40	+52	+48	+50
15 51	+49	+31	+40	+56	+32	+44	+63	+21	+42	+66	+31	+49	+75	+37	+56
16 51	+31	+9	+20	+38	+14	+26	+43	+8	+26	+48	+5	+27	+51	−4	+23
17 51	+7	+7	+7	+10	+8	+9	+9	+7	+8	+15	+4	+9	+20	−6	+7
18 51	+4	+7	+5	+2	+8	+5	0	+10	+5	−2	+10	+4	−3	+9	+3
19 51	+9	+9	+9	+11	+9	+10	+9	+10	+10	+14	+11	+12	+11	+11	+11
20 51	+22	+8	+15	+23	+9	+16	+21	+12	+17	+26	+14	+20	+27	+14	+21
21 51	+33	+10	+22	+34	+11	+23	+32	+11	+22	+34	+12	+23	+40	+22	+31
22 51	+41	+11	+26	+41	+13	+27	+38	+14	+26	+41	+15	+28	+48	+28	+38
23 51	+42	+10	+26	+42	+12	+27	+39	+12	+25	+42	+13	+28	+51	+25	+38
0 51	+42	+6	+24	+40	+8	+24	+39	+7	+23	+41	+7	+24	+51	+21	+36
1 51	+38	+3	+21	+38	+3	+21	+37	+3	+20	+39	+3	+21	+48	+16	+32
2 51	+36	−4	+16	+35	0	+17	+35	−1	+17	+37	+1	+19	+46	+13	+29
3 51	+34	−5	+14	+34	−2	+16	+33	−4	+14	+36	0	+18	+46	+10	+28
4 51	+42	−5	+18	+43	0	+21	+45	−3	+21	+47	0	+23	+56	+12	+34
5 51	+84	+1	+43	+87	+6	+46	+90	0	+45	+94	+5	+50	+112	+23	+68
6 51	+90	+13	+52	+94	+21	+57	+90	+7	+49	+102	+19	+60	+104	+41	+73
7 51	+20	+23	+21	+21	+32	+27	+14	+23	+18	+29	+22	+25	+9	+33	+21
8 51	−78	−4	−41	−78	+3	−37	−91	+7	−42	−84	−4	−44	−110	−23	−66
Range ..	271	122	184	280	124	194	275	97	177	305	125	205	334	180	250
Summed Range ..	1,320	440	859	1,367	488	907	1,361	393	856	1,503	470	969	1,695	772	1,209

TABLE XVa.—*Showing the mean diurnal inequality of Inclination for each month of the year 1911 and for the whole year.*

Unity=0.01 Minute of arc.

1911. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	− 89	− 47	− 93	−185	−214	−201	−161	−200	−165	−177	−137	−154	−152
10 51	−132	− 77	−140	−217	−231	−237	−192	−231	−218	−208	−140	−159	−182
11 51	−125	− 73	−160	−190	−216	−205	−176	−196	−210	−178	− 85	− 88	−158
12 51	− 54	− 18	−126	−110	−136	−128	−119	−131	−134	− 90	− 11	− 13	− 89
13 51	− 14	+ 13	− 43	− 35	− 41	− 54	− 51	− 47	− 38	− 16	+ 27	+ 36	− 22
14 51	+ 10	+ 36	+ 20	+ 9	+ 30	+ 19	+ 3	+ 9	+ 32	+ 34	+ 40	+ 62	+ 25
15 51	+ 33	+ 51	+ 31	+ 48	+ 65	+ 53	+ 34	+ 47	+ 53	+ 28	+ 38	+ 54	+ 45
16 51	+ 44	+ 47	+ 33	+ 39	+ 65	+ 59	+ 43	+ 54	+ 36	+ 12	+ 32	+ 27	+ 41
17 51	+ 40	+ 51	+ 32	+ 35	+ 45	+ 50	+ 39	+ 39	+ 17	+ 24	+ 39	+ 39	+ 37
18 51	+ 38	+ 59	+ 39	+ 47	+ 51	+ 39	+ 35	+ 45	+ 33	+ 42	+ 46	+ 37	+ 43
19 51	+ 44	+ 63	+ 38	+ 47	+ 57	+ 42	+ 38	+ 44	+ 36	+ 52	+ 43	+ 48	+ 46
20 51	+ 33	+ 48	+ 46	+ 55	+ 73	+ 53	+ 45	+ 54	+ 51	+ 61	+ 43	+ 39	+ 50
21 51	+ 35	+ 25	+ 46	+ 57	+ 66	+ 53	+ 54	+ 60	+ 52	+ 65	+ 41	+ 32	+ 49
22 51	+ 22	+ 15	+ 47	+ 55	+ 62	+ 63	+ 60	+ 53	+ 53	+ 58	+ 34	+ 22	+ 45
23 51	+ 28	+ 20	+ 45	+ 53	+ 57	+ 65	+ 54	+ 54	+ 54	+ 58	+ 25	+ 16	+ 44
0 51	+ 26	+ 3	+ 33	+ 57	+ 59	+ 64	+ 52	+ 49	+ 51	+ 53	+ 18	+ 12	+ 40
1 51	+ 23	0	+ 32	+ 35	+ 51	+ 63	+ 47	+ 50	+ 40	+ 46	+ 12	+ 3	+ 33
2 51	+ 9	− 7	+ 24	+ 39	+ 45	+ 60	+ 47	+ 46	+ 40	+ 37	+ 7	− 1	+ 29
3 51	+ 14	− 14	+ 20	+ 38	+ 41	+ 51	+ 43	+ 38	+ 33	+ 30	+ 10	− 2	+ 25
4 51	+ 1	− 22	+ 18	+ 38	+ 50	+ 61	+ 48	+ 50	+ 34	+ 35	+ 10	− 2	+ 27
5 51	− 1	− 25	+ 14	+ 66	+ 9[illegible]	+ 95	+ 77	+ 88	+ 64	+ 40	+ 8	+ 1	+ 43
6 51	− 6	− 51	+ 31	+ 85	+ 6[illegible]	+ 61	+ 67	+ 93	+107	+ 62	0	+ 17	+ 44
7 51	+ 14	− 48	+ 23	+ 18	− 1[illegible]	− 12	+ 2	+ 27	+ 47	+ 18	− 28	+ 15	+ 5
8 51	− 1	− 54	− 21	− 84	−12[illegible]	−109	− 88	− 92	− 77	− 79	− 76	− 49	− 71
Range ..	176	140	207	302	323	332	269	324	325	273	186	221	232
*Summed Range ..	836	867	1,155	1,642	1,953	1,897	1,575	1,797	1,675	1,503	950	929	1,345

TABLE XVb.—*Showing the mean diurnal inequality of Inclination for each month of the year 1912 and for the whole year.*

Unity=0.01 Minute of arc.

1912. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	−117	−103	− 97	−179	−197	−202	−187	−177	−198	−165	−114	− 41	−148
10 51	−146	−142	−190	−232	−210	−246	−234	−208	−236	−206	−133	− 48	−186
11 51	− 91	−139	−220	−215	−185	−214	−213	−176	−213	−196	− 85	− 48	−166
12 51	− 8	− 74	−175	−134	−124	−139	−137	−129	−130	−106	− 26	− 27	−101
13 51	+ 54	+ 2	− 88	− 43	− 42	− 56	− 68	− 51	− 39	− 24	− 13	− 6	− 31
14 51	+ 74	+ 46	+ 5	+ 10	+ 21	+ 10	− 6	+ 5	+ 35	+ 19	− 4	− 11	+ 17
15 51	+ 57	+ 52	+ 40	+ 39	+ 60	+ 56	+ 45	+ 47	+ 52	+ 27	+ 8	+ 9	+ 41
16 51	+ 22	+ 25	+ 39	+ 39	+ 56	+ 65	+ 61	+ 53	+ 28	+ 16	+ 32	+ 30	+ 39
17 51	+ 36	+ 9	+ 29	+ 27	+ 32	+ 57	+ 51	+ 28	+ 15	+ 31	+ 42	+ 33	+ 32
18 51	+ 40	+ 23	+ 32	+ 32	+ 32	+ 41	+ 38	+ 29	+ 28	+ 42	+ 49	+ 31	+ 35
19 51	+ 34	+ 26	+ 46	+ 45	+ 41	+ 44	+ 45	+ 36	+ 43	+ 58	+ 54	+ 34	+ 42
20 51	+ 30	+ 30	+ 53	+ 56	+ 50	+ 53	+ 50	+ 45	+ 55	+ 65	+ 56	+ 32	+ 48
21 51	+ 25	+ 33	+ 60	+ 67	+ 59	+ 61	+ 57	+ 52	+ 60	+ 67	+ 47	+ 33	+ 52
22 51	+ 21	+ 32	+ 57	+ 76	+ 60	+ 60	+ 67	+ 51	+ 66	+ 60	+ 45	+ 30	+ 52
23 51	+ 14	+ 28	+ 55	+ 62	+ 56	+ 61	+ 65	+ 53	+ 65	+ 63	+ 37	+ 26	+ 49
0 51	+ 11	+ 24	+ 53	+ 57	+ 50	+ 59	+ 59	+ 50	+ 58	+ 54	+ 23	+ 17	+ 43
1 51	− 2	+ 22	+ 45	+ 55	+ 44	+ 55	+ 59	+ 48	+ 56	+ 38	+ 18	+ 6	+ 37
2 51	− 7	+ 18	+ 39	+ 56	+ 43	+ 53	+ 57	+ 44	+ 56	+ 40	+ 13	+ 1	+ 34
3 51	− 3	+ 21	+ 34	+ 47	+ 45	+ 50	+ 54	+ 44	+ 48	+ 35	+ 8	− 4	+ 32
4 51	− 11	+ 21	+ 37	+ 46	+ 55	+ 56	+ 60	+ 51	+ 50	+ 34	+ 10	− 10	+ 33
5 51	− 7	+ 22	+ 42	+ 71	+ 92	+ 88	+ 90	+ 89	+ 84	+ 39	+ 2	− 10	+ 50
6 51	+ 4	+ 29	+ 58	+ 91	+ 73	+ 78	+ 67	+ 90	+106	+ 62	− 5	− 42	+ 51
7 51	+ 2	+ 26	+ 52	+ 19	− 6	+ 14	+ 12	+ 20	+ 13	+ 23	− 15	− 21	+ 12
8 51	− 33	− 22	+ 2	− 88	−108	−100	− 90	− 85	−107	− 68	− 54	− 22	− 65
Range ..	220	194	280	323	302	334	324	298	342	273	189	82	238
Summed Range ..	849	969	1,548	1,780	1,741	1,918	1,872	1,661	1,841	1,538	893	572	1,396

*Summed range means sum without regard to sign of the twenty-four ordinates of the diurnal inequality.

For the magnitude of the temperature and aperiodic corrections applicable to the diurnal inequalities, *vide* Tables XVI, XVII, XVIII and XX from which the corrections can be derived.

The diurnal inequality of Inclination is derived directly from the diurnal inequalities of H and V, by the use of the formula $\frac{d\,I}{\sin 1'} = d\,V\left(\frac{\cos^2 I}{\sin 1'\,H}\right) - d\,H\left(\frac{\sin 2\,I}{2\sin 1'\,H}\right)$, where I is the angle of the Dip, V and H are the absolute values of Vertical Force and Horizontal Force and d I, d V and d H are the ordinates of the diurnal inequality of I, V and H respectively. The factors for d V and d H are determined from the mean annual values of H and I for the years 1911 to 1915; 0·1γ corresponds in arc to 0′·00781, 0′·00779, 0′·00777, 0′·00775 and 0′·00774 for d V and to 0′·00344, 0′·00346, 0′·00347, 0′·00349 and 0′·00350 for d H respectively for these years. It will be seen that the diurnal inequalities derived from these factors are sufficiently accurate for the requirements.

TABLE XVc.—*Showing the mean diurnal inequality of Inclination for each month of the year 1913 and for the whole year.*

Unity=0·01 Minute of arc.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	− 87	− 71	−107	−211	−233	−172	−154	−181	−193	−181	−105	− 59	−146
10 51	−154	−103	−156	−246	−245	−201	−207	−208	−249	−211	−118	− 64	−180
11 51	−148	−110	−175	−215	−207	−191	−206	−180	−217	−157	− 73	− 50	−161
12 51	− 85	− 72	−119	−124	−129	−123	−149	−125	−124	− 62	− 8	− 5	− 94
13 51	− 28	− 34	− 36	− 45	− 36	− 47	− 81	− 58	− 24	+ 13	+ 16	+ 28	− 28
14 51	+ 8	− 18	+ 13	+ 19	+ 30	+ 14	− 7	+ 3	+ 42	+ 44	+ 17	+ 26	+ 16
15 51	+ 39	+ 3	+ 18	+ 42	+ 60	+ 56	+ 38	+ 39	+ 66	+ 45	+ 22	+ 20	+ 37
16 51	+ 48	+ 15	+ 10	+ 41	+ 54	+ 61	+ 61	+ 51	+ 47	+ 28	+ 29	+ 20	+ 39
17 51	+ 42	+ 31	+ 19	+ 32	+ 36	+ 45	+ 52	+ 26	+ 20	+ 25	+ 40	+ 29	+ 33
18 51	+ 57	+ 39	+ 30	+ 42	+ 26	+ 31	+ 36	+ 23	+ 31	+ 39	+ 39	+ 31	+ 35
19 51	+ 51	+ 40	+ 43	+ 53	+ 45	+ 41	+ 44	+ 34	+ 40	+ 44	+ 38	+ 32	+ 42
20 51	+ 47	+ 42	+ 54	+ 67	+ 58	+ 50	+ 52	+ 42	+ 49	+ 43	+ 40	+ 29	+ 48
21 51	+ 44	+ 48	+ 52	+ 72	+ 66	+ 53	+ 61	+ 54	+ 52	+ 50	+ 39	+ 28	+ 52
22 51	+ 41	+ 50	+ 59	+ 73	+ 68	+ 57	+ 59	+ 55	+ 54	+ 49	+ 35	+ 30	+ 52
23 51	+ 36	+ 42	+ 50	+ 68	+ 67	+ 53	+ 55	+ 52	+ 51	+ 46	+ 31	+ 24	+ 48
0 51	+ 29	+ 30	+ 50	+ 59	+ 63	+ 55	+ 54	+ 54	+ 51	+ 43	+ 24	+ 20	+ 44
1 51	+ 19	+ 27	+ 40	+ 58	+ 58	+ 51	+ 52	+ 51	+ 50	+ 37	+ 17	+ 12	+ 39
2 51	+ 18	+ 26	+ 33	+ 52	+ 58	+ 48	+ 47	+ 49	+ 45	+ 29	+ 11	+ 7	+ 35
3 51	+ 14	+ 18	+ 27	+ 43	+ 56	+ 45	+ 46	+ 51	+ 42	+ 27	+ 8	+ 1	+ 31
4 51	+ 6	+ 12	+ 29	+ 51	+ 64	+ 59	+ 55	+ 60	+ 48	+ 31	+ 7	− 5	+ 35
5 51	0	+ 8	+ 31	+ 80	+100	+ 92	+ 86	+ 99	+ 80	+ 37	− 1	− 10	+ 50
6 51	− 6	− 5	+ 51	+ 95	+ 80	+ 61	+ 67	+ 97	+106	+ 56	− 18	− 50	+ 44
7 51	+ 17	− 1	+ 29	+ 8	− 10	− 12	+ 14	+ 14	+ 30	+ 6	− 30	− 48	+ 1
8 51	− 1	− 17	− 37	−108	−128	−118	− 79	−104	− 97	− 77	− 69	− 44	− 73
Range ..	211	160	234	341	345	293	293	307	355	267	158	96	232
Summed Range ..	1,025	862	1,268	1,904	1,977	1,736	1,782	1,711	1,808	1,380	835	672	1,363

TABLE XVd.—*Showing the mean diurnal inequality of Inclination for each month of the year 1914 and for the whole year.*

Unity=0·01. Minute of arc.

1914 Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	− 93	−125	−106	−195	−225	−177	−179	−227	−249	−179	−118	− 26	−158
10 51	−110	−150	−172	−249	−258	−219	−229	−259	−271	−220	−147	− 71	−196
11 51	− 68	−119	−201	−234	−236	−206	−216	−237	−217	−201	−115	− 80	−177
12 51	− 4	− 40	−147	−159	−164	−137	−169	−145	−113	− 98	− 47	− 77	−108
13 51	+ 36	+ 26	− 60	− 65	− 76	− 55	− 91	− 63	− 19	0	− 9	− 47	− 35
14 51	+ 45	+ 44	+ 10	+ 9	− 5	+ 9	− 15	+ 17	+ 55	+ 56	+ 9	− 28	+ 17
15 51	+ 38	+ 42	+ 38	+ 33	+ 42	+ 56	+ 50	+ 75	+ 75	+ 51	+ 26	+ 7	+ 44
16 51	+ 8	+ 15	+ 32	+ 43	+ 53	+ 62	+ 64	+ 91	+ 45	+ 25	+ 32	+ 31	+ 42
17 51	+ 25	+ 8	+ 34	+ 35	+ 46	+ 49	+ 64	+ 57	+ 17	+ 28	+ 46	+ 37	+ 37
18 51	+ 37	+ 34	+ 38	+ 43	+ 36	+ 41	+ 50	+ 37	+ 15	+ 39	+ 51	+ 37	+ 38
19 51	+ 35	+ 44	+ 40	+ 51	+ 45	+ 51	+ 65	+ 45	+ 51	+ 43	+ 57	+ 37	+ 47
20 51	+ 34	+ 46	+ 50	+ 78	+ 56	+ 58	+ 66	+ 55	+ 63	+ 44	+ 52	+ 39	+ 53
21 51	+ 34	+ 44	+ 60	+ 79	+ 71	+ 61	+ 68	+ 56	+ 59	+ 51	+ 49	+ 38	+ 56
22 51	+ 28	+ 43	+ 60	+ 87	+ 78	+ 61	+ 64	+ 63	+ 65	+ 52	+ 46	+ 34	+ 57
23 51	+ 25	+ 38	+ 52	+ 82	+ 69	+ 61	+ 62	+ 58	+ 56	+ 50	+ 40	+ 40	+ 53
0 51	+ 17	+ 36	+ 46	+ 72	+ 67	+ 53	+ 63	+ 54	+ 54	+ 35	+ 30	+ 27	+ 46
1 51	+ 10	+ 26	+ 42	+ 64	+ 58	+ 54	+ 54	+ 55	+ 55	+ 36	+ 23	+ 15	+ 41
2 51	+ 4	+ 24	+ 36	+ 55	+ 56	+ 49	+ 52	+ 52	+ 54	+ 28	+ 17	+ 9	+ 36
3 51	+ 5	+ 21	+ 38	+ 50	+ 56	+ 44	+ 54	+ 55	+ 51	+ 26	+ 9	+ 4	+ 34
4 51	− 1	+ 15	+ 36	+ 46	+ 68	+ 52	+ 59	+ 63	+ 57	+ 28	+ 10	+ 2	+ 36
5 51	− 8	+ 9	+ 42	+ 63	+106	+ 86	+ 96	+105	+ 99	+ 38	+ 6	− 5	+ 53
6 51	− 22	+ 9	+ 56	+ 89	+105	+ 69	+ 69	+ 98	+117	+ 76	+ 2	− 27	+ 53
7 51	− 29	− 27	+ 29	+ 20	+ 33	0	− 1	+ 17	− 4	+ 46	− 13	0	+ 6
8 51	− 45	− 69	− 40	− 87	− 78	−111	−107	−126	−133	− 56	− 54	− 8	− 76
Range ..	155	196	261	338	364	305	325	364	388	296	204	120	253
Summed Range ..	751	1,054	1,465	1,988	2,087	1,821	2,007	2,110	1,994	1,506	1,008	726	1,499

TABLE XVe.—*Showing the mean diurnal inequality of Inclination for each month of the year 1915, and for the whole year.*

Unity = 0·01 Minute of arc.

1915. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
9 51	−137	−158	−144	−248	−254	−243	−230	−230	−302	−209	−160	−116	−203
10 51	−188	−180	−223	−326	−268	−277	−271	−250	−324	−256	−178	−167	−242
11 51	−128	−159	−235	−316	−220	−269	−241	−218	−298	−236	−104	−140	−214
12 51	− 43	− 75	−186	−219	−133	−204	−178	−150	−204	−131	− 19	− 66	−134
13 51	− 7	− 1	− 78	− 81	− 37	− 84	− 87	− 72	− 63	− 33	+ 35	− 23	− 44
14 51	+ 23	+ 49	+ 19	− 17	+ 22	+ 21	+ 2	+ 5	+ 32	+ 27	+ 39	+ 7	+ 22
15 51	+ 37	+ 58	+ 43	+ 54	+ 55	+ 94	+ 75	+ 46	+ 72	+ 36	+ 48	+ 25	+ 53
16 51	+ 25	+ 27	+ 33	+ 42	+ 48	+101	+ 96	+ 68	+ 60	+ 14	+ 29	+ 19	+ 47
17 51	+ 37	+ 23	+ 25	+ 40	+ 28	+ 98	+ 92	+ 52	+ 43	+ 25	+ 50	+ 41	+ 46
18 51	+ 50	+ 41	+ 33	+ 51	+ 27	+ 67	+ 50	+ 36	+ 52	+ 53	+ 62	+ 54	+ 48
19 51	+ 47	+ 47	+ 49	+ 60	+ 48	+ 71	+ 56	+ 43	+ 75	+ 66	+ 61	+ 53	+ 56
20 51	+ 51	+ 55	+ 64	+ 81	+ 62	+ 89	+ 64	+ 56	+ 80	+ 78	+ 55	+ 48	+ 65
21 51	+ 46	+ 50	+ 68	+ 94	+ 75	+ 90	+ 74	+ 68	+ 90	+ 92	+ 47	+ 48	+ 70
22 51	+ 46	+ 58	+ 79	+103	+ 78	+ 79	+ 68	+ 73	+ 87	+ 76	+ 52	+ 48	+ 71
23 51	+ 36	+ 51	+ 68	+ 97	+ 82	+ 76	+ 75	+ 70	+ 88	+ 73	+ 46	+ 40	+ 67
0 51	+ 33	+ 47	+ 65	+ 88	+ 81	+ 65	+ 72	+ 62	+ 83	+ 68	+ 31	+ 27	+ 60
1 51	+ 27	+ 32	+ 54	+ 86	+ 71	+ 61	+ 67	+ 62	+ 74	+ 62	+ 16	+ 25	+ 53
2 51	+ 21	+ 29	+ 40	+ 84	+ 68	+ 59	+ 63	+ 65	+ 68	+ 46	+ 11	+ 16	+ 47
3 51	+ 17	+ 26	+ 45	+ 79	+ 62	+ 49	+ 60	+ 66	+ 73	+ 45	+ 6	+ 9	+ 45
4 51	+ 11	+ 17	+ 46	+ 78	+ 80	+ 55	+ 70	+ 70	+ 72	+ 44	+ 12	+ 12	+ 47
5 51	+ 5	+ 26	+ 53	+105	+110	+ 89	+114	+113	+132	+ 56	+ 8	+ 17	+ 69
6 51	− 3	+ 30	+ 75	+113	+ 89	+ 61	+ 77	+104	+141	+ 84	+ 7	+ 20	+ 66
7 51	+ 13	0	+ 51	+ 34	− 20	− 19	− 20	− 1	+ 23	+ 20	− 35	+ 20	+ 5
8 51	− 22	− 82	− 39	−102	−146	−131	−142	−135	−160	− 93	−109	− 28	− 99
Range ..	239	238	314	439	378	378	385	363	465	348	240	221	313
Summed Range ..	1,053	1,321	1,815	2,598	2,164	2,452	2,344	2,115	2,696	1,923	1,218	1,069	1,873

TABLE XVf.—*Showing for the Summer months (April to September), the winter months (January to March and October to December), and the whole year, the mean diurnal inequality of Inclination during the period 1911—1915.*

Unity = 0·01 Minute of arc.

Years. Bombay Civil Time.	1911. April to September.	January to March and October to December.	Year.	1912. April to September.	January to March and October to December.	Year.	1913. April to September.	January to March and October to December.	Year.	1914. April to September.	January to March and October to December.	Year.	1915. April to September.	January to March and October to December.	Year.
H. m.															
9 51	−188	−116	−152	−190	−106	−148	−191	−102	−140	−209	−108	−158	−251	−154	−203
10 51	−221	−143	−182	−228	−144	−186	−226	−134	−180	−247	−145	−196	−286	−199	−242
11 51	−199	−118	−158	−203	−130	−166	−203	−119	−161	−224	−131	−177	−260	−167	−214
12 51	−126	− 52	− 89	−132	− 69	−101	−129	− 58	− 94	−148	− 69	−108	−181	− 87	−134
13 51	− 44	0	− 22	− 50	− 12	− 31	− 48	− 7	− 28	− 61	− 9	− 35	− 71	− 18	− 44
14 51	+ 17	+ 34	+ 25	+ 12	+ 21	+ 17	+ 17	+ 15	+ 16	+ 12	+ 23	+ 17	+ 22	+ 27	+ 22
15 51	+ 50	+ 39	+ 45	+ 50	+ 32	+ 41	+ 50	+ 24	+ 37	+ 55	+ 34	+ 44	+ 66	+ 41	+ 52
16 51	+ 49	+ 32	+ 41	+ 56	+ 27	+ 39	+ 52	+ 25	+ 39	+ 60	+ 24	+ 42	+ 69	+ 24	+ 47
17 51	+ 37	+ 37	+ 37	+ 35	+ 30	+ 32	+ 35	+ 31	+ 33	+ 45	+ 30	+ 37	+ 59	+ 33	+ 46
18 51	+ 42	+ 43	+ 43	+ 33	+ 36	+ 35	+ 31	+ 39	+ 35	+ 37	+ 39	+ 38	+ 47	+ 49	+ 48
19 51	+ 44	+ 48	+ 46	+ 42	+ 42	+ 42	+ 43	+ 41	+ 42	+ 51	+ 43	+ 47	+ 59	+ 54	+ 56
20 51	+ 55	+ 45	+ 50	+ 51	+ 44	+ 48	+ 53	+ 42	+ 48	+ 63	+ 44	+ 53	+ 72	+ 58	+ 65
21 51	+ 57	+ 41	+ 49	+ 59	+ 44	+ 52	+ 60	+ 43	+ 52	+ 66	+ 46	+ 56	+ 82	+ 58	+ 70
22 51	+ 58	+ 33	+ 45	+ 62	+ 41	+ 52	+ 61	+ 44	+ 52	+ 70	+ 44	+ 57	+ 81	+ 60	+ 71
23 51	+ 56	+ 32	+ 44	+ 60	+ 37	+ 49	+ 58	+ 38	+ 48	+ 65	+ 41	+ 53	+ 81	+ 52	+ 67
0 51	+ 55	+ 24	+ 40	+ 55	+ 30	+ 43	+ 56	+ 33	+ 44	+ 60	+ 32	+ 46	+ 75	+ 45	+ 60
1 51	+ 48	+ 19	+ 33	+ 53	+ 21	+ 37	+ 53	+ 25	+ 39	+ 57	+ 25	+ 41	+ 70	+ 36	+ 53
2 51	+ 46	+ 11	+ 29	+ 51	+ 17	+ 34	+ 50	+ 21	+ 35	+ 53	+ 20	+ 36	+ 68	+ 27	+ 47
3 51	+ 41	+ 10	+ 25	+ 48	+ 15	+ 32	+ 47	+ 16	+ 31	+ 52	+ 17	+ 34	+ 65	+ 25	+ 45
4 51	+ 47	+ 7	+ 27	+ 53	+ 13	+ 33	+ 56	+ 13	+ 35	+ 57	+ 15	+ 36	+ 71	+ 24	+ 47
5 51	+ 80	+ 6	+ 43	+ 86	+ 15	+ 50	+ 89	+ 11	+ 50	+ 92	+ 14	+ 53	+110	+ 27	+ 69
6 51	+ 80	+ 9	+ 44	+ 84	+ 18	+ 51	+ 84	+ 5	+ 44	+ 91	+ 16	+ 53	+ 97	+ 35	+ 66
7 51	+ 11	− 1	+ 5	+ 12	+ 11	+ 12	+ 7	− 4	+ 1	+ 11	+ 1	+ 6	0	+ 11	+ 5
8 51	− 95	− 47	− 71	− 96	− 33	− 65	−106	− 41	− 73	−107	− 45	− 76	−136	− 62	− 99
Range ..	301	191	232	314	188	238	315	178	232	339	191	253	396	259	313
Summed Range ..	1,746	947	1,345	1,795	988	1,396	1,805	931	1,363	1,993	1,015	1,499	2,373	1,373	1,873

TABLE XVI.—*Showing the mean temperatures in the Horizontal Force Magnetograph enclosure and the excesses over the means for each of the five observation hours during the period 1911 to 1915.*

Months.	H. m. 9 52	H. m. 13 52	H. m. 15 52	H. m. 21 52	H. m. 5 52	Monthly and Yearly means.
1911.						
	°	°	°	°	°	°
January ..	− ·02	+ ·01	+ ·03	+ ·05	− ·05	82·96
February ..	− ·04	− ·02	+ ·02	+ ·07	− ·04	81·97
March ..	− ·02	− ·02	·00	+ ·03	+ ·02	83·51
April ..	− ·02	− ·02	− ·01	+ ·03	+ ·03	85·81
May ..	·00	− ·03	− ·01	+ ·02	·00	88·94
June ..	+ ·01	+ ·01	+ ·02	+ ·01	− ·06	90·28
July ..	+ ·02	+ ·01	+ ·01	·00	− ·05	88·79
August ..	+ ·02	+ ·01	+ ·02	+ ·01	− ·07	86·58
September ..	− ·01	− ·02	− ·01	·00	·00	86·87
October ..	− ·01	− ·01	·00	+ ·03	·00	89·03
November ..	− ·01	+ ·01	+ ·02	+ ·04	− ·04	88·88
December ..	− ·01	·00	+ ·02	+ ·04	− ·07	87·63
April to September ..	·00	− ·01	·00	+ ·01	− ·02	87·88
October to March ..	− ·02	·00	+ ·01	+ ·04	− ·03	85·66
Year ..	− ·01	− ·01	+ ·01	+ ·03	− ·03	86·77
1913.						
January ..	− ·04	− ·01	+ ·02	+ ·07	− ·07	83·30
February ..	− ·04	− ·02	+ ·02	+ ·06	− ·02	82·87
March ..	− ·03	− ·03	·00	+ ·04	·00	83·61
April ..	− ·03	− ·03	− ·02	+ ·04	+ ·05	86·20
May ..	− ·02	− ·03	− ·03	+ ·02	+ ·04	89·95
June ..	+ ·03	+ ·01	+ ·01	+ ·01	− ·07	91·30
July ..	+ ·04	+ ·02	+ ·02	+ ·01	− ·08	88·31
August ..	− ·01	− ·01	·00	+ ·01	− ·01	86·81
September ..	− ·01	− ·02	− ·01	+ ·01	+ ·01	87·90
October ..	− ·01	− ·01	·00	+ ·02	− ·02	89·40
November ..	− ·01	·00	+ ·02	+ ·06	− ·07	88·13
December ..	·00	+ ·01	− ·01	+ ·06	− ·04	86·19
April to September ..	·00	− ·01	·00	+ ·02	− ·01	88·41
October to March ..	− ·02	− ·01	+ ·01	+ ·05	− ·04	85·58
Year ..	− ·01	− ·01	·00	+ ·03	− ·02	87·00
1915.						
January ..	·00	·00	+ ·02	+ ·06	− ·07	83·05
February ..	+ ·01	·00	+ ·01	+ ·04	− ·04	82·10
March ..	− ·01	− ·03	− ·02	+ ·02	+ ·04	83·10
April ..	− ·02	− ·03	− ·01	+ ·01	+ ·05	86·78
May ..	+ ·01	− ·01	− ·01	·00	·00	89·53
June ..	+ ·05	+ ·02	+ ·01	+ ·04	− ·04	91·30

Months.	H. m. 9 52	H. m. 13 52	H. m. 15 52	H. m. 21 52	H. m. 5 52	Monthly and Yearly means.
1912.						
	°	°	°	°	°	°
January ..	·00	+ ·01	+ ·03	+ ·04	− ·07	84·93
February ..	+ ·01	·00	+ ·02	+ ·02	− ·03	84·08
March ..	− ·01	− ·02	·00	+ ·02	·00	84·85
April ..	− ·04	− ·02	·00	+ ·02	+ ·03	87·62
May ..	− ·03	− ·02	− ·01	+ ·04	+ ·03	90·53
June ..	+ ·02	+ ·02	+ ·01	− ·01	− ·03	91·96
July ..	+ ·05	+ ·03	+ ·02	− ·02	− ·09	88·79
August ..	+ ·01	+ ·01	+ ·02	+ ·01	− ·04	86·49
September ..	− ·02	− ·02	− ·01	+ ·03	+ ·03	87·43
October ..	− ·03	− ·01	·00	+ ·05	− ·03	89·23
November ..	− ·01	+ ·01	+ ·02	+ ·06	− ·09	88·30
December ..	− ·03	+ ·01	+ ·03	+ ·07	− ·09	85·56
April to September ..	·00	·00	·00	+ ·01	− ·01	88·80
October to March ..	− ·01	·00	+ ·02	+ ·04	− ·05	86·16
Year ..	− ·01	·00	+ ·01	+ ·03	− ·03	87·48
1914.						
January ..	− ·02	·00	+ ·03	+ ·08	− ·07	83·97
February ..	·00	− ·01	− ·01	+ ·03	− ·01	83·27
March ..	+ ·01	− ·01	− ·01	+ ·02	·00	83·66
April ..	+ ·01	− ·03	− ·03	+ ·02	+ ·03	85·22
May ..	·00	− ·01	− ·02	+ ·02	+ ·03	88·39
June ..	+ ·05	+ ·02	+ ·01	·00	− ·06	89·85
July ..	+ ·05	+ ·02	+ ·02	·00	− ·09	87·05
August ..	+ ·02	+ ·01	+ ·01	− ·01	− ·03	85·29
September ..	+ ·02	− ·01	− ·01	− ·01	− ·02	86·13
October ..	− ·01	− ·02	·00	+ ·07	− ·02	88·01
November ..	·00	− ·01	+ ·01	+ ·07	− ·08	88·48
December ..	+ ·02	+ ·02	+ ·03	+ ·06	− ·11	85·91
April to September ..	+ ·02	·00	·00	·00	− ·02	86·99
October to March ..	·00	·00	+ ·01	+ ·05	− ·05	85·55
Year ..	+ ·01	·00	·00	+ ·03	− ·04	86·27
1915.						
July ..	+ ·04	+ ·02	+ ·02	− ·02	− ·06	88·17
August ..	+ ·02	+ ·01	+ ·02	·00	− ·04	86·24
September ..	+ ·01	− ·01	− ·01	+ ·01	+ ·01	86·93
October ..	+ ·02	− ·01	− ·01	+ ·01	− ·02	87·50
November ..	·00	− ·03	·00	+ ·05	− ·03	87·72
December ..	+ ·02	+ ·01	+ ·03	+ ·06	− ·10	85·56
April to September ..	+ ·02	·00	·00	− ·01	− ·01	88·16
October to March ..	+ ·01	− ·01	·00	+ ·04	− ·04	84·84
Year ..	+ ·01	·00	·00	+ ·02	− ·02	86·50

TABLE XVII.—*Showing the mean temperatures in the Vertical Force Magnetograph enclosure and the excesses over the means for each of the five observation hours during the period 1911 to 1915.*

Months.	H. m. 9 50	H. m. 13 50	H. m. 15 50	H. m. 21 50	H. m. 5 50	Monthly and Yearly means.
1911.						
	°	°	°	°	°	°
January ..	− ·03	·00	+ ·02	+ ·06	− ·05	82·90
February ..	− ·05	− ·01	+ ·03	+ ·08	− ·03	81·89
March ..	− ·03	− ·02	·00	+ ·04	+ ·02	83·45
April ..	− ·03	− ·02	− ·01	+ ·03	+ ·03	85·79
May ..	·00	− ·01	− ·01	+ ·02	+ ·01	88·94
June ..	+ ·01	+ ·01	+ ·02	+ ·01	− ·05	90·32
July ..	+ ·02	+ ·02	+ ·02	+ ·01	− ·05	88·77
August ..	+ ·03	+ ·02	+ ·02	+ ·02	− ·07	86·52
September ..	·00	− ·02	− ·01	+ ·01	·00	86·84
October ..	− ·02	− ·02	·00	+ ·04	− ·01	89·04
November ..	− ·03	·00	+ ·01	+ ·05	− ·04	88·89
December ..	− ·03	+ ·01	+ ·02	+ ·06	− ·07	87·59
April to September ..	·00	·00	·00	+ ·02	− ·02	87·86
October to March ..	− ·03	− ·01	+ ·01	+ ·05	− ·03	85·63
Year ..	− ·01	·00	+ ·01	+ ·04	− ·03	86·74
1912.						
	°	°	°	°	°	°
January	− ·02	+ ·01	+ ·03	+ ·06	− ·06	84·85
February ..	− ·02	·00	+ ·02	+ ·04	− ·04	84·01
March ..	− ·03	− ·01	·00	+ ·04	·00	84·79
April ..	− ·03	− ·02	·00	+ ·01	+ ·03	87·61
May ..	− ·03	− ·02	− ·01	+ ·03	+ ·04	90·57
June ..	+ ·01	+ ·01	+ ·01	− ·02	− ·04	91·96
July ..	+ ·05	+ ·04	+ ·02	− ·03	− ·09	88·77
August ..	·00	·00	+ ·01	+ ·02	− ·04	86·43
September ..	− ·03	− ·02	− ·01	+ ·03	+ ·03	87·40
October ..	− ·03	·00	+ ·01	+ ·06	− ·02	89·25
November ..	− ·02	+ ·01	+ ·03	+ ·07	− ·08	88·29
December ..	− ·03	·00	+ ·03	+ ·07	− ·07	85·48
April to September ..	·00	·00	·00	+ ·01	− ·01	88·79
October to March ..	− ·02	·00	+ ·02	+ ·06	− ·04	86·11
Year ..	− ·01	·00	+ ·01	+ ·03	− ·03	87·45
1913.						
January ..	− ·04	− ·01	+ ·02	+ ·08	− ·07	83·20
February ..	− ·05	− ·01	+ ·02	+ ·06	− ·01	82·77
March ..	− ·04	− ·02	·00	+ ·04	+ ·01	83·54
April ..	− ·06	− ·03	− ·01	+ ·03	+ ·05	86·18
May ..	− ·02	− ·02	− ·02	+ ·02	+ ·05	89·99
June ..	+ ·04	+ ·01	+ ·01	+ ·01	− ·07	91·35
July ..	+ ·04	+ ·03	+ ·02	·00	− ·07	88·30
August ..	·00	·00	·00	+ ·01	+ ·01	86·75
September ..	− ·01	− ·01	− ·01	+ ·01	+ ·01	87·87
October ..	− ·01	− ·01	+ ·01	+ ·03	− ·01	89·39
November ..	− ·02	·00	+ ·02	+ ·07	− ·07	88·09
December ..	− ·02	·00	+ ·01	+ ·06	− ·07	86·11
April to September ..	·00	·00	·00	+ ·01	·00	88·41
October to March ..	− ·03	− ·01	+ ·01	+ ·06	− ·04	85·52
Year ..	− ·02	− ·01	+ ·01	+ ·03	− ·02	86·96
1914.						
January ..	− ·04	+ ·01	+ ·02	+ ·09	− ·06	83·86
February ..	− ·02	− ·02	− ·01	+ ·04	− ·01	83·17
March ..	− ·01	− ·01	·00	+ ·03	+ ·01	83·56
April ..	·00	− ·02	− ·02	+ ·02	+ ·03	85·14
May ..	− ·02	− ·01	− ·01	+ ·02	+ ·03	88·39
June ..	+ ·03	+ ·02	+ ·01	·00	− ·07	89·87
July ..	+ ·04	+ ·03	+ ·03	·00	− ·09	86·98
August ..	+ ·01	+ ·01	+ ·01	+ ·01	− ·03	85·21
September ..	+ ·01	·00	·00	·00	− ·01	86·05
October ..	− ·02	− ·01	− ·01	+ ·08	− ·02	87·99
November ..	− ·01	·00	+ ·01	+ ·08	− ·08	88·46
December ..	·00	+ ·01	+ ·03	+ ·07	− ·12	85·83
April to September ..	+ ·01	·00	·00	+ ·01	− ·02	86·94
October to March ..	− ·02	·00	+ ·01	+ ·06	− ·05	85·48
Year ..	·00	·00	·00	+ ·04	− ·03	86·21
1915.						
January ..	− ·01	·00	+ ·02	+ ·07	− ·07	82·95
February ..	+ ·01	·00	·00	+ ·04	− ·04	82·10
March ..	− ·02	− ·03	− ·02	+ ·03	+ ·04	83·01
April ..	− ·03	− ·03	− ·02	+ ·02	+ ·05	86·75
May ..	·00	− ·01	− ·01	·00	·00	89·56
June ..	+ ·05	+ ·03	+ ·01	− ·04	− ·06	91·33
1915.						
July ..	+ ·03	+ ·02	+ ·03	− ·02	− ·06	88·09
August ..	+ ·02	+ ·01	+ ·02	·00	− ·04	86·12
September ..	·00	·00	− ·01	·00	·00	86·86
October ..	+ ·02	·00	− ·01	+ ·01	− ·01	87·46
November ..	− ·01	− ·02	·00	+ ·06	− ·04	87·68
December ..	+ ·01	+ ·01	+ ·02	+ ·06	− ·10	85·54
April to September ..	+ ·01	·00	·00	− ·01	− ·02	88·12
October to March ..	·00	− ·01	·00	+ ·04	− ·04	84·79
Year ..	+ ·01	·00	·00	+ ·02	− ·03	86·45

TABLE XVIII.—*Showing the progressive change per day of the Horizontal Force Magnetograph as derived by different processes.*

Unity=0.1γ=0.000001 C. G. S.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	April to September.	October to March.	Year.
(1) Derived from the monthly means of the tabulated ordinates.															
1911 ..	−1	−2	−4	−5	−4	−1	0	−1	−4	−3	−1	+1	−2	−2	−2
1912 ..	+2	−1	−5	−6	−4	0	0	−2	−3	−2	+1	+2	−2	0	−1
1913 ..	0	−2	−4	−6	−3	+1	+2	−3	−5	−1	+2	+2	−2	0	−1
1914 ..	+1	−1	−4	−4	−3	−1	+1	−2	−4	−2	+2	+3	−2	0	−1
1915 ..	+1	−1	−4	−5	−7	−1	+4	−1	−4	−4	+2	+5	−2	0	−1
(2) Derived from the differences in the daily means of the first and the last day of each month.															
1911 ..	−6	−4	−1	−8	−12	+9	0	−1	−2	−3	−2	−2	−2	−3	−3
1912 ..	−4	−2	0	−6	−3	+1	−4	0	−6	+11	+4	0	−3	+1	−1
1913 ..	−5	−1	−9	−7	−4	+1	+7	−4	−5	−3	+2	+3	−2	−2	−2
1914 ..	−2	0	+2	−2	−4	+8	−2	−3	−7	+3	+9	+4	−2	+3	0
1915 ..	−10	−1	−8	−4	−1	−6	+5	−3	−17	+3	+22	+3	−4	+1	−1
(3) Derived from a single tabulated reading at 10 hour of the first day of each month.															
1911 ..	−7	+4	−2	−6	−12	+14	−9	+1	−3	0	−7	−5	−2	−3	−3
1912 ..	+5	−1	+5	−11	−4	−6	+8	−8	−5	+7	−5	+1	−4	+2	−1
1913 ..	−3	+8	−11	−6	+2	−6	+7	−2	−10	+3	+3	+1	−2	0	−1
1914 ...	−6	−4	+5	−4	−22	+13	−2	−2	−8	+8	+3	+1	−4	+1	−1
1915 ..	−3	+2	−2	−3	−7	−3	+7	−7	0	−15	+11	+1	−2	−1	−2
(4) Derived from a single tabulated reading at 0 hour of the first day of each month.															
1911 ..	0	+1	−10	−6	−7	+13	−5	+1	−1	−2	−4	−5	−1	−3	−2
1912 ..	+8	−2	−1	−5	−3	−5	+2	0	−5	−1	+3	+1	−3	+1	−1
1913 ..	−2	−2	−12	−2	−1	−2	+6	−2	−4	−8	+3	+6	−1	−2	−2
1914 ..	−3	−2	0	−6	−6	+2	+1	−2	−4	−1	+6	+6	−2	+1	−1
1915 ..	−2	+1	−9	−3	−7	−3	+5	−3	−11	+11	0	+5	−4	+1	−1

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TABLE XIX.—*Showing the progressive change per day of the Declination Magnetograph as derived by different processes.*

Unity=0.01 Minute of arc.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	April to September.	October to March.	Year.
(1) Derived from the monthly means of the tabulated ordinates.															
1911 ..	0	0	−1	−1	−1	−1	0	−1	−1	−1	0	0	−1	0	−1
1912 ..	0	0	−1	−2	−2	0	+2	0	−1	−1	0	+2	0	0	0
1913 ..	+1	0	−2	−3	−3	0	+1	0	−1	0	0	+1	−1	0	0
1914 ..	+1	+1	0	−2	−2	0	0	+1	+1	+1	0	0	0	0	0
1915 ..	+1	+1	0	−2	−2	−1	0	+1	0	0	0	0	−1	0	0
(2) Derived from the differences in the daily means of the first and the last day of each month.															
1911 ..	+1	0	−2	+1	0	−1	0	+1	−2	−1	0	+1	0	0	0
1912 ..	+1	0	−2	−3	−2	+1	+1	−2	0	−3	+1	+2	−1	0	0
1913 ..	0	0	−1	−5	−2	+2	+1	−1	−2	0	0	+1	−1	0	−1
1914 ..	0	0	0	−2	0	0	+3	+2	+1	0	−2	+2	+1	0	0
1915 ..	−1	+3	−1	−2	−3	−1	0	+2	+2	0	0	0	0	0	0
(3) Derived from a single tabulated reading at 10 hour of the first day of each month.															
1911 ..	0	−2	−1	−1	−5	+6	−2	+1	−1	−5	−2	0	0	−2	−1
1912 ..	+5	+4	−1	−10	−1	+7	−3	0	−1	−4	+6	+1	−1	+2	0
1913 ..	+2	−1	0	−5	−11	+10	0	−6	+4	−2	0	+5	−1	+1	0
1914 ..	−3	0	+8	−12	−2	+2	+5	0	−1	+2	−2	+7	−1	+2	0
1915 ..	−7	+7	+7	−12	−3	+1	−10	+12	−5	+2	+2	−3	−3	+1	−1
(4) Derived from a single tabulated reading at 0 hour of the first day of each month.															
1911 ..	+2	−3	+1	−2	−1	−3	0	+1	−2	−2	−1	0	−1	0	−1
1912 ..	+1	0	−2	−2	−3	+1	+4	−2	0	−3	0	+3	0	0	0
1913 ..	+2	−1	0	−4	−5	+3	+1	−1	−1	+1	−1	+1	−1	0	0
1914 ..	+1	+1	−1	0	−2	+1	+1	0	+1	+1	−1	+1	0	0	0
1915 ..	+1	+1	0	−2	−1	−4	+2	+2	+2	−1	−2	0	0	0	0

TABLE XX.—*Showing the progressive change per day of the Vertical Force Magnetograph as derived by different processes.*

Unity=0.1γ=0.000001 C. G. S.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	April to September.	October to March.	Year.
(1) Derived from the monthly means of the tabulated ordinates.															
1911 ..	+1	+8	+10	+8	+12	+12	+8	+8	+8	+13	+7	+1	+9	+7	+8
1912 ..	0	0	+5	(+4)	(+5)	+10	+4	+2	+15	+14	+2	−3	+7	+3	+5
1913 ..	0	+7	+8	+8	+7	−7	−7	+4	+10	+12	+5	−4	+2	+5	+4
1914 ..	−1	−2	+1	+9	(+10)	(+5)	(+1)	+1	+17	+18	−5	−12	+7	0	+3
1915 ..	−4	0	+7	+14	+8	−11	−14	+3	+15	+15	+3	−6	+2	+2	+2
(2) Derived from the differences in the daily means of the first and the last day of each month.															
1911 ..	+17	−27	+5	+13	+16	+20	−11	+3	0	+14	−15	+21	+7	+2	+5
1912 ..	−13	+3	+9	+14	+8	+7	+13	+5	+8	+27	+ 7	−10	+9	+4	+6
1913 ..	−2	+29	−9	+5	+13	−18	−8	+11	+6	+25	−4	−3	+1	+6	+4
1914 ..	+6	0	−3	−4	+35	−30	+1	+16	+5	+19	0	−17	+4	+1	+2
1915 ..	+1	0	+9	−12	+12	−15	−14	+2	+22	+15	0	−16	−1	+1	0
(3) Derived from a single tabulated reading at 10 hour of the first day of each month.															
1911 ..	+24	−22	+13	+15	+13	+23	−11	+17	+12	+15	−5	+22	+11	+8	+10
1912 ..	−9	+5	+9	+2	+10	+7	+11	−1	+11	+30	+10	−11	+7	+6	+6
1913 ..	−3	+28	−12	+3	+13	+17	−3	+8	+22	+32	−12	−2	+4	+5	+5
1914 ..	−4	0	+5	−12	+43	−38	−4	+17	+12	+21	0	−22	+3	0	+1
1915 ..	−4	−2	+12	+9	+14	−7	−23	0	+19	+29	+1	−16	+2	+3	+3
(4) Derived from a single tabulated reading at 0 hour of the first day of each month.															
1911 ..	+16	−17	+19	+13	+17	+16	−10	+17	+3	+11	+12	+17	+9	+10	+9
1912 ..	−11	+6	+10	+11	+8	+7	+11	+3	+7	+25	+5	−11	+8	+4	+6
1913 ..	−1	+25	−7	+5	+15	−18	−6	+12	+6	+20	−12	−3	+2	+4	+3
1914 ..	+4	−1	−2	0	+35	−25	−2	+13	+9	+20	−3	−19	+5	0	+2
1915 ..	−1	−6	+9	−9	+40	−13	−16	+2	+23	+14	+1	−12	+4	+1	+3

Owing to adjustments of the V. F. Magnetograph values in brackets had to be interpolated.

APPENDIX A.

ABSOLUTE VALUES AND THE DIURNAL INEQUALITIES OF HORIZONTAL FORCE, DECLINATION AND VERTICAL FORCE, AS DERIVED FROM QUIET DAYS FOR THE YEARS 1911 TO 1915.

The usual process for obtaining the absolute values and diurnal inequalities from all (unrestricted) days of the year has been continued and the results have already been given in this volume in the magnetic data. The following tables which contain similar results completed to 1915 on the other hand have been derived from quiet days, on lines adopted in the "Colaba Magnetic Data (1846 to 1905)" Part II, Chapter XI.

Tables I, II and III give the mean monthly absolute values of H, D and V, derived (1) from *all* days, (2) from different sets of quiet days, and (3) their differences. It will be seen from the results that the conclusions drawn in the "Colaba Magnetic Data" continue all more or less to be confirmed by the present data. At Alibag as at Colaba quiet conditions usually connote high values of Horizontal Force, and low values of Vertical Force and Easterly Declination. In Vertical Force results however the differences between the all-day and quiet day results are greater than noted in the previous discussion and somewhat irregular. This is due to the different methods of use of the Vertical Force Magnetograph adopted in the two results. In the Colaba instrument which gave the former result, the magnet was never disturbed from its position of rest, while in the Alibag Magnetograph giving the latter result, the magnet is daily raised on its Ys and put back in position. The latter procedure, it will be seen, while conducing to better conditions for securing variations, is fatal to the correct registration of absolute values of force due to the failure of the balance to regain after the operation, its original position of rest resulting in the displacement of the base line. This and other considerations, revealed in investigations, have resulted in altering the usual method of observation at Alibag. While retaining the routine of absolute observations twice in the week of H and D which were found sufficient in number to ensure accurate daily values of these two elements, for the element V *daily* observations with the Inductor were found essential and have been introduced since. This allows the values of the base line and thence the absolute values of V to be determined from day to day much more reliably. It will be seen that the International Quiet days show on the whole quieter conditions than those of locally selected days as connoted by the higher differences from all (unrestricted) days in case of the former.

Tables IV to X give the results of the diurnal inequalities of H, D and V derived severally (1) from quiet days selected by the International Commission of Terrestrial Magnetism, and (2) from quiet days selected locally. The series given previously derived from days selected by the Astronomer Royal has been discontinued as no such selection is now made. Diurnal inequalities determined from the Astronomer Royal's days thus extend the series which is already published in the Colaba Magnetic Data, Part II, Chapter XI, from 1894—1905, up to 1910 only. All diurnal inequalities published in the present volume have been given uncorrected for the aperiodic change; however the values of the elements for the initial and the terminal hours have been given to allow of the corrections to be determined and applied, if wanted. It must be noted that for quiet days selected locally, the diurnal inequalities are derived from 0^h to 24^h Bombay Civil Mean Time. For quiet days selected by the International Commission, however, the days are reckoned from 5^h to 5^h of local time corresponding to the Greenwich civil day 0^h to 24^h so as to have the inequalities at this observatory strictly simultaneous with those of different observatories all over the world.

TABLE I.—*Absolute values of Horizontal Force derived from all days, and from quiet days* (1) *selected by the International Commission of Terrestrial Magnetism, and* (2) *selected locally and the differences between the values derived from all days and from these two sets of quiet days.*

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
						Absolute values : All days.							
36000γ +													
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	844·8	840·9	846·4	849·2	852·8	862·1	863·6	865·0	861·7	860·2	865·1	862·9	856·2
1912 ..	871·2	873·0	877·1	873·2	874·5	876·8	877·5	868·8	871·1	874·3	871·2	877·3	873·8
1913 ..	877·8	874·5	876·7	872·3	879·2	884·4	882·7	883·5	877·2	881·5	883·2	883·2	879·7
1914 ..	886·9	884·8	883·3	877·8	887·3	886·7	885·0	879·8	874·7	874·4	875·9	883·8	881·7
1915 ..	879·7	875·4	877·0	876·2	879·6	862·5	873·4	870·0	865·8	859·1	853·3	867·4	869·9
						Absolute values : Quiet days selected by the International Commission of Terrestrial Magnetism.							
36000γ +													
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	850·1	848·3	858·0	854·8	859·1	864·6	870·8	871·2	864·6	865·4	872·5	870·6	862·5
1912 ..	870·5	876·4	880·9	875·6	879·3	879·5	879·6	870·4	874·9	874·2	875·9	881·0	876·5
1913 ..	881·5	880·7	885·4	881·4	885·2	887·2	886·5	884·8	893·8	893·0	886·5	885·2	885·9
1914 ..	885·8	887·4	887·1	882·4	883·5	890·9	892·1	882·7	881·3	884·4	886·3	886·2	885·8
1915 ..	882·7	883·8	888·5	885·6	884·0	870·2	877·6	878·5	874·8	873·8	866·3	878·2	878·7
						Absolute values : Quiet days selected locally.							
36000γ +													
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	848·1	847·8	858·1	855·3	859·7	866·4	868·5	873·0	869·2	866·2	870·2	868·6	862·6
1912 ..	876·8	872·0	880·8	880·5	877·8	879·5	879·7	871·3	877·9	876·6	872·4	880·1	877·1
1913 ..	880·3	878·1	883·7	881·8	881·9	886·9	882·9	885·6	878·8	889·5	886·7	882·2	883·2
1914 ..	887·7	887·6	883·5	881·8	889·1	888·8	888·5	881·2	881·2	878·9	880·2	886·4	884·6
1915 ..	883·9	881·8	889·2	879·9	885·3	877·7	872·4	881·1	874·9	869·0	863·3	876·0	877·9
						Differences : Quiet days selected by the International Commission of Terrestrial Magnetism less *all days.*							
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	+5·3	+7·4	+11·6	+5·6	+6·3	+2·5	+7·2	+6·2	+2·9	+5·2	+7·4	+7·7	+6·3
1912 ..	−0·7	+3·4	+3·8	+2·4	+4·8	+2·7	+2·1	+1·6	+3·8	−0·1	+4·7	+3·7	+2·7
1913 ..	+3·7	+6·2	+8·7	+9·1	+6·0	+2·8	+3·8	+1·3	+16·6	+11·5	+3·3	+2·0	+6·2
1914 ..	−1·1	+2·6	+3·8	+4·6	−3·8	+4·2	+7·1	+2·9	+6·6	+10·0	+10·4	+2·4	+4·1
1915 ..	+3·0	+8·4	+11·5	+9·4	+4·4	+7·7	+4·2	+8·5	+9·0	+14·7	+13·0	+10·8	+8·7
						Differences : Quiet days selected locally less *all days.*							
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	+3·3	+6·9	+11·7	+6·1	+6·9	+4·3	+4·9	+8·0	+7·5	+6·0	+5·1	+5·7	+6·4
1912 ..	+5·6	−1·0	+3·8	+7·3	+3·3	+2·7	+2·2	+2·5	+6·8	+2·3	+1·2	+2·8	+3·3
1913 ..	+2·5	+3·6	+7·0	+9·5	+2·7	+2·5	+0·2	+2·1	+1·6	+8·0	+3·5	−1·0	+3·5
1914 ..	+0·8	+2·8	+0·2	+4·0	+2·8	+2·1	+3·5	+1·4	+6·5	+4·5	+4·3	+2·6	+2·9
1915 ..	+4·2	+6·4	+12·2	+3·7	+5·7	+15·2	−1·0	+11·1	+9·1	+9·9	+10·0	+8·6	+7·9

TABLE II.—*Absolute values of Declination derived from all days and from quiet days (1) selected by the International Commission of Terrestrial Magnetism and (2) selected locally and the differences between the values derived from all days and from these two sets of quiet days.*

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
						Absolute values : All days.							
0°E+	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″
1911 ..	56 13	56 0	55 59	55 25	55 13	54 54	54 31	54 3	53 46	53 44	53 21	53 13	54 42
1912 ..	52 53	52 34	52 8	52 7	51 41	51 6	50 58	50 45	50 25	50 10	49 48	49 27	51 10
1913 ..	49 9	48 49	48 29	48 32	48 7	47 50	47 18	46 59	46 33	46 35	46 16	46 4	47 33
1914 ..	45 43	45 29	45 15	45 7	44 47	44 26	44 9	43 48	43 26	43 7	42 49	42 41	44 14
1915 ..	42 19	41 58	41 42	41 29	41 8	40 49	40 29	40 15	39 55	39 36	39 21	38 49	40 39
						Absolute values : Quiet days selected by the International Commission of Terrestrial Magnetism.							
0°E+	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″
1911 ..	56 11	55 52	55 56	55 23	55 11	54 43	54 34	53 58	53 51	53 45	53 13	53 10	54 39
1912 ..	53 3	52 34	52 8	52 3	51 23	51 4	50 52	50 53	50 34	50 16	49 38	49 22	51 9
1913 ..	49 12	48 44	48 28	48 23	48 5	47 58	47 13	46 58	46 34	46 22	46 12	46 9	47 31
1914 ..	45 40	45 20	45 15	45 16	44 52	44 17	44 0	43 48	43 17	43 7	42 41	42 41	44 12
1915 ..	42 10	42 0	41 34	41 16	41 4	40 49	40 25	40 16	39 58	39 29	39 17	38 46	40 35
						Absolute values : Quiet days selected locally.							
0°E+	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″
1911 ..	56 13	55 52	55 50	55 25	55 10	54 46	54 31	54 2	53 47	53 44	53 16	53 10	54 39
1912 ..	52 57	52 36	52 4	51 59	51 37	51 5	50 50	50 43	50 25	50 14	49 49	49 25	51 9
1913 ..	49 10	48 38	48 31	48 31	48 7	47 53	47 23	46 55	46 38	46 28	46 14	46 5	47 33
1914 ..	45 41	45 23	45 19	45 15	44 43	44 15	44 10	43 52	43 19	43 10	42 41	42 40	44 12
1915 ..	42 13	41 57	41 31	41 22	41 14	40 32	40 31	40 9	39 56	39 33	39 15	38 44	40 35
						Differences : Quiet days selected by the International Commission of Terrestrial Magnetism less *all days.*							
	″	″	″	″	″	″	″	″	″	″	″	″	″
1911 ..	−2	−8	−3	−2	−2	−11	+3	−5	+5	+1	−8	−3	−3
1912 ..	+10	0	0	−4	−18	−2	−8	+8	+9	+6	−10	−5	−1
1913 ..	+3	−5	−1	−9	−2	+8	−5	−1	+1	−13	−4	+5	−2
1914 ..	−3	0	0	+9	+5	−9	−9	0	−9	0	−8	0	−2
1915 ..	−9	+2	−8	−13	−4	0	−4	+1	−2	−7	−4	−3	−4
						Differences : Quiet days selected locally less *all days.*							
	″	″	″	″	″	″	″	″	″	″	″	″	″
1911 ..	0	−8	−9	0	−3	−8	0	−1	+1	0	−5	−3	−3
1912 ..	+4	+2	−4	−8	−4	−1	+1	−2	0	+4	+1	−2	−1
1913 ..	+1	−11	+2	−1	0	+3	+5	−4	+5	+7	−2	+1	−1
1914 ..	−2	−6	+4	+8	−4	−11	+1	+4	−7	+3	−8	−1	−2
1915 ..	−6	−1	−11	−7	+6	−17	+2	−6	+1	−3	−6	−5	−4

TABLE III.—*Absolute values of Vertical Force derived from all days and from quiet days* (1) *selected by the International Commission of Terrestrial Magnetism, and* (2) *selected locally and the differences between the values derived from all days and from these two sets of quiet days.*

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
						Absolute Values : All days.							
16000γ +													
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	197·0	215·1	218·4	220·0	226·2	253·4	270·1	261·8	282·1	265·5	285·2	303·7	249·9
1912 ..	314·5	327·7	340·7	344·6	357·5	356·4	371·0	376·0	388·1	399·9	400·9	415·3	366·8
1913 ..	427·9	434·3	449·0	456·2	468·3	481·2	483·2	485·3	489·2	492·5	493·7	523·2	473·7
1914 ..	531·2	537·5	553·6	559·4	577·9	581·2	584·6	588·2	604·3	615·2	627·2	634·2	582·9
1915 ..	648·5	651·5	657·7	664·7	668·2	682·6	694·5	696·5	710·8	721·6	721·4	738·1	688·0
						Absolute values : Quiet days selected by the International Commission of Terrestrial Magnetism.							
16000γ +													
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	187·3	214·6	202·3	223·5	228·1	254·3	268·7	270·7	281·6	258·7	279·9	299·7	247·4
1912 ..	316·5	325·4	336·5	338·7	351·6	356·7	367·7	377·3	391·6	402·8	410·6	414·4	365·8
1913 ..	438·6	439·9	449·9	458·9	471·3	472·4	484·8	486·8	495·0	495·2	495·9	522·0	475·4
1914 ..	531·7	536·2	557·6	565·3	573·1	577·5	582·9	592·5	610·8	618·7	630·0	639·1	584·6
1915 ..	647·5	650·6	662·1	662·0	664·7	684·5	693·1	699·2	707·9	718·0	725·6	737·0	687·7
						Absolute values : Quiet days selected locally.							
16000γ +													
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	190·4	218·6	206·3	223·2	229·4	254·3	265·4	262·6	279·8	267·6	277·5	308·1	248·6
1912 ..	311·2	325·5	335·6	347·1	342·3	354·7	368·2	374·8	392·4	399·7	406·2	419·9	364·8
1913 ..	434·2	439·3	450·2	455·0	466·6	473·3	484·0	483·1	490·5	491·3	495·4	518·0	473·4
1914 ..	530·7	538·6	554·8	566·0	574·9	583·1	586·7	589·8	611·8	614·4	624·5	637·2	584·4
1915 ..	647·7	646·5	660·6	666·0	666·9	680·2	695·1	700·8	701·9	718·6	731·3	737·7	687·8
						Differences : Quiet days selected by the International Commission of Terrestrial Magnetism less *all days.*							
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	−9·7	−0·5	−16·1	+3·5	+1·9	+0·9	−1·4	+8·9	−0·5	−6·8	−5·3	−4·0	−2·4
1912 ..	+2·0	−2·3	−4·2	−5·9	−5·9	+0·3	−3·3	+1·3	+3·5	+2·9	+0·7	−0·9	−1·0
1913 ..	+5·7	+5·6	+0·9	+2·7	+3·0	−9·8	+1·6	+1·5	+5·8	+2·7	+2·2	−1·2	+1·7
1914 ..	+0·5	−1·3	+4·0	+5·9	−4·8	−3·7	−1·7	+4·3	+6·5	+3·5	+2·8	+4·9	+1·7
1915 ..	−1·0	−0·9	+4·4	−2·7	−3·5	+1·9	−1·4	+2·7	−2·9	−3·6	+4·2	−1·1	−0·3
						Differences : Quiet days selected locally less *all days.*							
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1911 ..	−6·6	+3·5	−12·1	+3·2	+3·2	+0·9	−4·7	+0·8	−2·3	+2·1	−7·7	+4·4	−1·3
1912 ..	−3·3	−2·2	−5·1	+2·5	−15·2	−1·7	−2·8	−1·2	+4·3	−0.2	−3·7	+4·6	−2·0
1913 ..	+6·3	+5·0	+1·2	−1·2	−1·7	−7·9	+0·8	−2·2	+1·3	−1·2	+1·7	−5·2	−0·3
1914 ..	−0·5	+1·1	+1·2	+6·6	−3·0	+1·9	+2·1	+1·6	+7·5	−0·8	−2·7	+3·0	+1·5
1915 ..	−0·8	−5·0	+2·9	+1·3	−1·3	−2·4	+0·6	+4·3	−8·9	−3·0	+9·9	−0·4	−0·2

TABLE IVa.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1911.*

Unity $= 0 \cdot 1\gamma = 0 \cdot 000001$ C. G. S.

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 52	− 44	− 78	− 93	−118	−115	−102	−121	− 76	− 63	− 60	− 80	− 54	− 84
5 52	− 32	− 56	− 75	−115	−124	−104	− 86	− 85	− 60	− 55	− 58	− 31	− 73
6 52	− 28	− 5	− 29	− 79	− 49	− 49	− 61	− 40	− 98	− 57	− 12	− 21	− 44
7 52	− 24	+ 86	+ 60	0	+ 48	+ 22	− 16	+ 1	−105	− 28	+ 69	+ 27	+ 12
8 52	+ 3	+166	+163	+141	+164	+ 88	+ 99	+ 90	− 19	+ 40	+179	+ 75	+ 99
9 52	+ 57	+223	+255	+260	+228	+184	+211	+174	+ 87	+156	+269	+135	+187
10 52	+123	+225	+295	+293	+267	+267	+271	+229	+164	+203	+300	+160	+233
11 52	+152	+213	+307	+258	+249	+265	+277	+269	+206	+190	+267	+133	+232
12 52	+122	+159	+229	+193	+200	+234	+216	+262	+212	+166	+158	+ 62	+184
13 52	+ 84	+ 74	+118	+112	+ 99	+165	+147	+186	+157	+106	+ 78	− 5	+110
14 52	+ 54	+ 15	+ 33	+ 41	+ 11	+ 66	+ 65	+ 83	+ 75	+ 28	0	− 21	+ 37
15 52	+ 3	− 23	+ 3	− 21	− 46	− 28	− 10	− 14	+ 3	− 15	− 60	− 47	− 21
16 52	− 62	− 55	− 23	− 63	− 57	− 76	− 65	− 79	− 32	− 42	− 81	− 56	− 58
17 52	− 77	− 91	− 70	− 81	− 82	− 97	− 90	− 99	− 44	− 52	− 94	− 46	− 77
18 52	− 60	−116	−112	−109	−100	− 93	−106	− 99	− 56	− 63	−113	− 48	− 90
19 52	− 78	−107	−129	−117	− 98	− 98	− 99	−111	− 75	− 65	−104	− 37	− 93
20 52	− 65	−112	−139	−114	− 99	−100	− 96	−108	− 65	− 72	−118	− 33	− 93
21 52	− 62	−121	−145	−108	− 90	− 96	− 96	− 97	− 64	− 89	−119	− 39	− 94
22 52	− 55	− 91	−133	−105	− 77	− 84	− 93	− 94	− 56	− 78	−106	− 24	− 83
23 52	− 50	− 87	−113	− 89	− 80	− 90	− 92	− 82	− 38	− 74	− 81	− 22	− 75
0 52	− 12	− 81	−113	− 82	− 91	− 87	− 80	− 68	− 44	− 64	− 83	− 28	− 69
1 52	+ 8	− 77	−105	− 60	− 77	− 81	− 68	− 69	− 38	− 55	− 79	− 28	− 61
2 52	− 4	− 32	− 97	− 56	− 66	− 67	− 61	− 84	− 37	− 33	− 76	− 29	− 53
3 52	+ 18	− 55	− 89	− 31	− 54	− 64	− 70	− 85	− 27	− 10	− 63	− 33	− 47
4 52	+ 14	− 24	− 93	− 26	− 42	− 46	− 77	− 77	− 25	− 3	− 57	− 26	− 40
Range ..	230	346	452	411	391	371	398	380	317	292	419	216	327

TABLE IVb.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1912.*

Unity $= 0 \cdot 1\gamma = 0 \cdot 000001$ C. G. S.

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 52	− 45	− 49	− 77	− 89	−103	−100	−107	− 75	− 60	−101	− 69	− 59	− 78
5 52	− 41	− 37	− 71	− 89	− 67	− 98	− 85	− 85	− 60	− 83	− 60	− 48	− 69
6 52	− 37	− 32	− 45	− 73	− 34	− 57	− 28	− 78	− 55	− 52	− 21	− 4	− 43
7 52	− 33	− 13	+ 8	− 11	+ 34	+ 15	+ 36	− 47	− 44	+ 16	+ 22	+ 54	+ 3
8 52	− 10	+ 35	+100	+ 94	+129	+110	+115	+ 11	+ 36	+116	+ 80	+115	+ 78
9 52	+ 65	+ 94	+187	+197	+181	+202	+182	+ 96	+138	+197	+145	+184	+150
10 52	+130	+147	+280	+237	+210	+257	+233	+167	+189	+247	+188	+197	+207
11 52	+132	+189	+279	+218	+204	+235	+258	+192	+191	+241	+165	+160	+205
12 52	+ 78	+162	+231	+172	+160	+185	+235	+175	+176	+165	+109	+111	+163
13 52	+ 31	+ 89	+138	+109	+106	+137	+185	+108	+135	+ 80	+ 51	+ 61	+102
14 52	− 1	+ 34	+ 42	+ 51	+ 49	+ 68	+105	+ 55	+ 65	+ 34	+ 35	+ 16	+ 46
15 52	− 15	− 6	− 29	+ 17	+ 9	+ 1	+ 18	+ 10	+ 13	+ 10	0	− 26	0
16 52	− 21	− 23	− 53	− 18	− 32	− 40	− 69	− 38	− 26	− 28	− 19	− 44	− 34
17 52	− 21	− 33	− 67	− 52	− 74	− 80	−105	− 62	− 42	− 63	− 35	− 58	− 58
18 52	− 31	− 38	− 87	− 76	− 92	− 90	−102	− 66	− 73	− 91	− 54	− 66	− 72
19 52	− 26	− 50	− 91	− 91	− 94	− 94	− 97	− 67	− 80	−101	− 69	− 68	− 77
20 52	− 34	− 67	− 99	− 82	−100	− 91	− 93	− 65	− 84	−106	− 81	− 81	− 82
21 52	− 31	− 80	− 95	− 81	− 92	− 90	− 93	− 54	− 78	−101	− 72	− 90	− 80
22 52	− 23	− 76	−105	− 76	− 78	− 82	− 94	− 46	− 74	− 89	− 68	− 85	− 75
23 52	− 18	− 59	− 91	− 77	− 73	− 78	− 98	− 48	− 59	− 83	− 62	− 70	− 68
0 52	− 14	− 52	− 93	− 80	− 66	− 82	− 98	− 44	− 57	− 73	− 63	− 61	− 65
1 52	− 15	− 47	− 94	− 75	− 57	− 84	− 99	− 40	− 59	− 63	− 58	− 49	− 62
2 52	− 20	− 40	− 89	− 73	− 63	− 77	− 98	− 24	− 48	− 53	− 46	− 50	− 57
3 52	− 22	− 48	− 82	− 62	− 71	− 79	−102	− 7	− 49	− 48	− 44	− 45	− 55
4 52	− 4	− 49	− 73	− 59	− 69	− 78	− 98	+ 3	− 49	− 47	− 24	− 40	− 49
Range ..	177	269	385	328	313	357	365	277	275	353	269	287	289

TABLE IVc.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Horizontal Force for each month of the year; and for the whole year 1913.*

Unity = 0·1γ = 0.000001 C. G. S.

1913. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	− 66	− 73	−117	−102	−100	−113	−112	− 71	− 69	− 74	− 97	− 61	− 88
5 51	− 52	− 64	−109	− 98	− 91	−104	−109	− 73	− 66	− 60	− 79	− 51	− 90
6 51	− 4	− 26	− 64	− 69	− 45	− 56	− 76	− 67	− 76	− 30	− 5	− 5	− 44
7 51	+ 54	+ 45	+ 21	+ 15	+ 47	+ 23	+ 9	− 41	− 55	+ 15	+ 82	+ 68	+ 24
8 51	+113	+125	+139	+182	+135	+149	+ 91	+ 23	+ 47	+155	+170	+132	+122
9 51	+166	+184	+263	+316	+211	+258	+197	+118	+142	+278	+225	+193	+213
10 51	+188	+224	+335	+350	+262	+318	+268	+164	+199	+309	+250	+214	+257
11 51	+179	+216	+341	+314	+259	+309	+293	+191	+213	+255	+214	+181	+247
12 51	+123	+155	+278	+227	+224	+286	+271	+189	+167	+153	+142	+123	+195
13 51	+ 53	+ 82	+140	+137	+148	+207	+218	+142	+ 89	+ 27	+ 73	+ 69	+115
14 51	+ 22	+ 33	+ 43	+ 47	+ 66	+108	+ 71	+ 70	− 4	− 6	+ 13	+ 11	+ 39
15 51	− 8	− 24	− 15	− 9	− 11	+ 4	+ 18	+ 14	− 49	− 30	− 43	− 39	− 16
16 51	− 32	− 45	− 57	− 61	− 78	− 85	− 69	− 32	− 55	− 42	− 72	− 69	− 58
17 51	− 49	− 52	− 90	− 97	−110	−141	−111	− 65	− 66	− 57	− 75	− 79	− 83
18 51	− 77	− 63	−113	−131	− 96	−142	−109	− 74	− 69	− 86	− 85	− 71	− 93
19 51	− 76	− 72	−124	−132	−102	−140	−107	− 70	− 78	− 90	− 91	− 68	− 96
20 51	− 75	− 78	−125	−129	−114	−131	−102	− 69	− 71	− 99	− 98	− 73	− 97
21 51	− 78	− 79	−115	−124	−106	−126	−114	− 56	− 68	−107	−101	− 74	− 96
22 51	− 80	− 82	−106	−116	−100	−126	−110	− 57	− 59	− 99	− 93	− 63	− 91
23 51	− 81	− 83	−109	−111	− 87	−116	− 96	− 51	− 45	− 93	− 82	− 66	− 85
0 51	− 67	− 85	−114	−121	− 90	−112	− 95	− 60	− 22	− 86	− 77	− 63	− 83
1 51	− 63	− 78	−110	−116	− 82	−100	−102	− 61	− 15	− 89	− 68	− 71	− 80
2 51	− 54	− 71	− 98	− 91	− 83	−101	− 84	− 46	− 8	− 76	− 69	− 68	− 71
3 51	− 49	− 80	−102	− 88	− 73	− 86	− 94	− 37	− 10	− 66	− 58	− 70	− 68
4 51	− 38	− 73	−105	− 91	− 68	− 74	− 99	− 25	− 11	− 66	− 57	− 52	− 63
Range ..	269	309	466	482	376	460	407	265	291	416	351	293	354

TABLE IVd.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1914.*

Unity = 0·γ = 0·000001 C. G. S.

1914. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	− 52	− 47	− 67	− 80	− 73	−109	−110	− 78	− 70	− 93	− 70	− 83	− 78
5 51	− 31	− 50	− 69	− 63	− 63	− 84	− 94	− 57	− 80	− 84	− 49	− 61	− 65
6 51	+ 8	− 29	− 78	− 23	− 50	− 56	− 51	− 22	− 85	− 80	+ 7	+ 1	− 38
7 51	+ 75	+ 13	− 27	+ 27	+ 8	+ 20	+ 28	− 1	− 55	− 23	+ 73	+ 60	+ 16
8 51	+120	+ 86	+ 61	+152	+109	+108	+133	+ 97	+ 4	+ 55	+139	+122	+ 99
9 51	+161	+163	+157	+275	+169	+210	+236	+169	+ 87	+126	+173	+190	+176
10 51	+172	+230	+244	+291	+194	+254	+274	+245	+149	+229	+227	+195	+225
11 51	+141	+229	+242	+272	+168	+254	+259	+235	+183	+284	+204	+157	+219
12 51	+ 83	+170	+180	+234	+125	+213	+225	+220	+ 81	+240	+143	+ 95	+167
13 51	+ 26	+ 91	+118	+157	+ 70	+139	+165	+192	+136	+140	+ 78	+ 21	+111
14 51	− 1	+ 44	+ 47	+ 66	+ 1	+ 47	+ 99	+127	+ 81	+ 38	+ 19	− 42	+ 44
15 51	− 25	− 22	− 11	+ 5	− 31	− 12	+ 22	+ 33	+ 14	− 17	− 33	− 58	− 11
16 51	− 56	− 67	− 38	− 54	− 47	− 71	− 67	− 68	− 22	− 60	− 54	− 57	− 55
17 51	− 76	− 74	− 54	− 90	− 50	− 92	−116	−107	− 36	− 67	− 58	− 45	− 72
18 51	− 70	− 74	− 74	−127	− 58	− 96	−131	−131	− 45	−105	− 80	− 51	− 87
19 51	− 66	− 86	− 78	−138	− 61	− 94	−119	−135	− 38	−117	− 89	− 60	− 90
20 51	− 69	− 93	− 80	−150	− 59	− 90	−114	−102	− 46	−104	− 87	− 71	− 89
21 51	− 68	− 92	− 74	−154	− 49	− 96	−110	− 98	− 58	− 83	− 99	− 72	− 88
22 51	− 58	− 82	− 72	−128	− 50	− 85	− 93	− 83	− 47	− 56	− 92	− 70	− 76
23 51	− 55	− 65	− 69	−110	− 46	− 72	− 78	− 90	− 37	− 62	− 98	− 65	− 71
0 51	− 56	− 75	− 77	− 93	− 52	− 65	− 84	− 91	− 40	− 47	− 88	− 48	− 68
1 51	− 49	− 55	− 70	− 98	− 43	− 73	− 85	−102	− 31	− 49	− 79	− 27	− 63
2 51	− 34	− 55	− 56	− 93	− 54	− 81	− 93	− 84	− 38	− 50	− 64	− 32	− 61
3 51	− 35	− 59	− 63	− 87	− 65	− 81	− 99	− 81	− 31	− 45	− 45	− 29	− 60
4 51	− 15	− 57	− 38	− 67	− 52	− 75	−100	− 62	− 27	− 22	− 34	− 14	− 47
Range ..	248	323	324	445	267	363	405	380	268	401	326	278	315

TABLE IVe.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1915.*

Unity = 0·1γ = 0·000001 C. G. S.

1915. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	− 78	− 94	−134	−144	−149	−108	−167	−146	−134	−172	− 82	− 87	−125
5 51	− 51	− 80	−136	−136	−129	− 96	−141	−122	−140	−147	− 67	− 62	−109
6 51	0	− 65	− 87	−100	− 94	− 51	− 71	− 78	−151	−122	− 47	− 51	− 76
7 51	+ 58	+ 3	+ 13	− 31	+ 20	+ 25	+ 20	+ 10	− 97	− 54	+ 13	− 16	− 3
8 51	+131	+109	+155	+103	+164	+109	+120	+125	+ 67	+147	+ 96	+ 56	+115
9 51	+197	+190	+261	+317	+256	+208	+234	+243	+225	+293	+157	+132	+226
10 51	+256	+248	+310	+403	+293	+178	+306	+315	+308	+363	+227	+193	+283
11 51	+220	+278	+330	+403	+285	+321	+325	+334	+356	+357	+223	+206	+302
12 51	+143	+237	+282	+315	+245	+306	+273	+280	+319	+281	+161	+142	+249
13 51	+ 55	+173	+271	+196	+149	+216	+211	+190	+182	+160	+ 81	+ 56	+162
14 51	+ 7	+ 81	+107	+103	+ 64	+103	+113	+ 89	+181	+ 72	+ 47	+ 8	+ 81
15 51	− 42	− 16	+ 24	+ 48	− 5	− 16	− 4	+ 26	− 29	− 8	− 3	− 15	− 3
16 51	− 72	− 72	− 49	− 17	− 46	−106	− 86	− 41	− 87	− 57	− 23	− 43	− 58
17 51	− 80	− 79	− 93	− 66	− 75	−128	−126	− 78	− 81	− 87	− 31	− 52	− 81
18 51	− 63	− 78	−105	−121	− 89	−125	−121	−103	− 87	−104	− 51	− 58	− 92
19 51	− 71	− 85	−128	−132	−123	−115	−112	−123	− 91	−125	− 85	− 59	−104
20 51	− 83	−115	−142	−138	−123	−107	−114	−124	−113	−138	− 88	− 65	−112
21 51	− 91	−107	−159	−162	−117	− 97	−121	−135	− 97	−130	−102	− 58	−115
22 51	− 85	−106	− 72	−168	−114	− 92	−116	−128	− 89	−115	− 70	− 56	−101
23 51	− 83	−102	−150	−145	− 97	− 88	−123	−105	− 67	−110	− 92	− 48	−101
0 51	− 78	− 88	−144	−158	−100	− 75	−113	−106	− 83	−103	− 81	− 51	− 98
1 51	− 82	− 95	−131	−137	− 87	− 87	− 90	−111	− 88	− 88	− 69	− 45	− 92
2 51	− 69	− 86	−124	−142	− 78	− 90	− 81	−121	− 74	− 82	− 62	− 30	− 87
3 51	− 56	− 72	− 99	−138	− 75	− 91	− 67	−105	− 61	− 76	− 61	− 30	− 78
4 51	− 52	− 59	−115	−129	− 88	− 93	− 35	−105	− 67	− 80	− 55	− 30	− 76
Range ..	341	393	479	571	442	449	492	480	507	535	329	293	427

TABLE IVf.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Horizontal Force for summer months (April to September), winter months (October to March), and the whole year for each of the years 1911 to 1915.*

Unity = 0·1γ = 0·000001 C. G. S.

Bombay Civil Time.	1911. April to September.	October to March.	Year.	1912. April to September.	October to March.	Year.	1913. April to September.	October to March.	Year.	1914. April to September.	October to March.	Year.	1915. April to September.	October to March.	Year.
H.															
5 ..	− 99	− 68	− 84	− 89	−67	− 78	− 94	− 81	− 88	− 87	− 69	− 78	−141	−108	−125
6 ..	− 96	− 51	− 73	− 81	− 57	− 69	− 90	− 69	− 90	− 73	− 57	− 65	−127	− 90	−109
7 ..	− 63	− 25	− 44	− 54	− 32	− 43	− 65	− 22	− 44	− 48	− 28	− 38	− 91	− 62	− 76
8 ..	− 8	+ 32	+ 12	− 3	+ 9	+ 3	0	+ 47	+ 24	+ 4	+ 28	+ 16	− 9	+ 3	− 3
9 ..	+ 94	+104	+ 99	+ 82	+ 73	+ 78	+104	+139	+122	+100	+ 97	+ 99	+115	+116	+115
10 ..	+191	+182	+187	+166	+145	+156	+207	+218	+213	+191	+162	+176	+247	+205	+226
11 ..	+248	+218	+233	+215	+198	+207	+260	+253	+257	+234	+216	+225	+300	+266	+283
12 ..	+254	+210	+232	+216	+191	+205	+263	+231	+247	+228	+209	+219	+337	+267	+302
13 ..	+219	+149	+184	+184	+143	+163	+227	+162	+195	+183	+152	+167	+290	+208	+249
14 ..	+144	+ 76	+110	+130	+ 75	+102	+157	+ 74	+115	+143	+ 79	+111	+191	+133	+162
15 ..	+ 57	+ 18	+ 37	+ 65	+ 27	+ 46	+ 60	+ 19	+ 39	+ 70	+ 17	+ 44	+109	+ 54	+ 81
16 ..	− 19	− 23	− 21	+ 11	− 11	0	− 5	− 26	− 16	+ 5	− 28	− 11	+ 3	− 10	− 3
17 ..	− 62	− 53	− 58	− 37	− 31	− 34	− 63	− 53	− 58	− 55	− 55	− 55	− 64	− 53	− 58
18 ..	− 82	− 72	− 77	− 69	− 46	− 58	− 98	− 67	− 83	− 82	− 62	− 72	− 92	− 70	− 81
19 ..	− 94	− 85	− 90	− 83	− 61	− 72	−103	− 82	− 93	− 98	− 76	− 87	−108	− 76	− 92
20 ..	−100	− 87	− 93	− 87	− 67	− 77	−105	− 87	− 96	− 97	− 83	− 90	−116	− 92	−104
21 ..	− 97	− 90	− 93	− 86	− 78	− 82	−103	− 91	− 97	− 93	− 84	− 89	−120	−105	−112
22 ..	− 92	− 96	− 94	− 81	− 78	− 80	− 99	− 92	− 96	− 94	− 81	− 88	−121	−108	−115
23 ..	− 85	− 81	− 83	− 75	− 74	− 75	− 95	− 87	− 91	− 81	− 72	− 76	−118	− 84	−101
0 ..	− 78	− 71	− 75	− 72	− 64	− 68	− 84	− 86	− 85	− 72	− 69	− 71	−104	− 97	−101
1 ..	− 75	− 63	− 69	− 71	− 59	− 65	− 83	− 82	− 83	− 71	− 65	− 68	−106	− 91	− 98
2 ..	− 65	− 56	− 61	− 69	− 54	− 62	− 79	− 80	− 80	− 72	− 55	− 63	−100	− 85	− 92
3 ..	− 62	− 45	− 53	− 64	− 50	− 57	− 69	− 73	− 71	− 74	− 48	− 61	− 98	− 75	− 87
4 ..	− 55	− 38	− 47	− 62	− 48	− 55	− 65	− 71	− 68	− 74	− 46	− 60	− 89	− 66	− 78
5 ..	− 49	− 31	− 40	− 58	− 39	− 49	− 61	− 65	− 63	− 64	− 30	− 47	− 86	− 65	− 76
Range ..	354	314	327	305	276	289	368	345	354	332	300	315	478	375	427

TABLE Va.—*Showing for the quiet days locally selected the mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1911.*

Unity = 0·1γ = 0·000001 C. G. S.

1911.	Month.												Year.
Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
H. m.													
23 52	− 88	−116	−113	− 89	− 89	−135	−108	− 94	− 94	− 81	−112	− 50	− 97
0 52	− 90	− 89	−112	−125	− 83	−122	− 99	− 91	− 93	− 80	−119	− 68	− 98
1 52	− 80	−103	−115	−120	− 95	−122	− 97	− 85	− 94	− 66	− 97	− 70	− 95
2 52	− 62	− 90	− 99	−116	− 87	−117	− 78	− 92	− 83	− 41	−101	− 58	− 85
3 52	− 66	− 86	− 90	−103	− 77	−116	− 95	− 94	− 65	− 41	− 90	− 54	− 81
4 52	− 53	− 67	− 90	−100	− 83	−113	− 94	− 88	− 72	− 32	− 87	− 47	− 77
5 52	− 42	− 66	− 74	− 97	− 78	−116	− 81	− 93	− 63	− 37	− 74	− 27	− 71
6 52	− 15	− 11	− 32	− 55	− 34	− 56	− 44	− 58	− 67	− 40	− 9	− 14	− 36
7 52	+ 7	+ 81	− 41	+ 27	+ 48	+ 43	+ 11	+ 9	− 55	0	+ 94	+ 35	+ 22
8 52	+ 60	+156	+157	+169	+132	+142	+127	+ 84	+ 23	+ 70	+190	+ 73	+115
9 52	+106	+237	+247	+295	+194	+235	+226	+178	+128	+160	+255	+119	+198
10 52	+151	+261	+290	+325	+235	+327	+266	+246	+202	+207	+290	+169	+247
11 52	+158	+253	+293	+284	+221	+320	+248	+260	+251	+218	+247	+147	+242
12 52	+ 99	+187	+231	+213	+178	+259	+194	+239	+257	+178	+173	+ 93	+192
13 52	+ 89	+106	+129	+124	+ 97	+165	+125	+153	+192	+100	+ 87	+ 37	+117
14 52	+ 69	+ 48	+ 41	+ 54	+ 22	+ 60	+ 48	+ 79	+ 99	+ 48	+ 14	+ 1	+ 49
15 52	+ 26	− 11	+ 4	− 4	− 41	− 34	− 9	− 7	+ 32	0	− 51	− 19	− 9
16 52	− 8	− 55	− 23	− 49	− 63	− 84	− 45	− 72	− 27	− 42	− 80	− 20	− 47
17 52	− 26	−104	− 59	− 76	− 64	−101	− 65	− 92	− 46	− 64	− 89	− 30	− 68
18 52	− 39	−101	− 95	−112	− 67	− 96	− 92	− 85	− 59	− 87	−101	− 40	− 81
19 52	− 68	−101	−108	−120	− 64	− 95	− 88	− 89	− 70	−101	− 90	− 47	− 87
20 52	− 54	−118	−118	−110	− 80	− 99	− 90	− 85	− 92	−108	−103	− 48	− 92
21 52	− 61	−120	−120	−107	− 74	− 93	− 94	− 78	−112	− 97	−102	− 47	− 92
22 52	− 28	−106	−110	− 99	− 70	− 83	− 86	− 63	− 99	− 75	− 81	− 44	− 79
23 52	− 53	− 92	− 93	− 96	− 49	− 76	− 73	− 41	− 87	− 67	− 65	− 34	− 69
Range ..	248	381	413	450	330	462	374	354	369	326	409	239	345

TABLE Vb.—*Showing for the quiet days locally selected the mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1912.*

Unity = 0·1γ = 0·000001 C. G. S.

1912.	Month.												Year.
Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
H. m.													
23 52	− 84	− 81	−113	−127	− 85	− 90	−121	− 80	− 74	−107	−129	−103	− 99
0 52	− 83	− 87	−119	−130	− 84	− 88	−108	− 61	− 70	−117	−121	− 90	− 96
1 52	− 77	− 65	−122	−126	− 88	− 97	−104	− 64	− 64	−103	−101	− 85	− 91
2 52	− 78	− 82	−108	−121	− 82	− 95	−103	− 65	− 60	− 98	−100	− 81	− 89
3 52	− 80	− 72	−100	−117	− 88	− 94	−103	− 75	− 65	− 95	− 88	− 59	− 86
4 52	− 70	− 58	− 94	−106	− 84	−103	− 97	− 66	− 63	− 74	− 71	− 53	− 78
5 52	− 61	− 51	− 82	−112	− 81	− 92	− 75	− 75	− 71	− 63	− 69	− 38	− 72
6 52	− 31	− 45	− 52	− 90	− 47	− 56	− 11	− 74	− 67	− 21	− 25	− 1	− 43
7 52	+ 15	− 9	+ 10	− 4	+ 22	− 9	+ 58	− 42	− 50	+ 53	+ 29	+ 56	+ 11
8 52	+ 89	+ 42	+127	+158	+123	+ 60	+153	+ 32	+ 46	+151	+112	+113	+100
9 52	+172	+ 94	+219	+291	+202	+156	+219	+110	+155	+233	+182	+171	+184
10 52	+201	+146	+299	+335	+248	+233	+260	+177	+201	+274	+222	+184	+232
11 52	+181	+183	+292	+306	+247	+248	+255	+201	+197	+263	+208	+142	+227
12 52	+119	+158	+247	+239	+207	+224	+203	+182	+173	+172	+128	+ 82	+178
13 52	+ 70	+104	+150	+130	+125	+160	+129	+115	+112	+ 76	+ 59	+ 27	+105
14 52	+ 17	+ 61	+ 60	+ 46	+ 40	+100	+ 67	+ 65	+ 58	+ 19	+ 29	+ 21	+ 49
15 52	− 11	+ 27	− 15	+ 6	− 18	+ 26	+ 2	+ 13	+ 28	− 5	− 10	+ 4	+ 4
16 52	− 32	+ 5	− 47	− 25	− 51	− 38	− 61	− 27	− 2	− 31	− 16	− 20	− 30
17 52	− 43	− 17	− 72	− 50	− 74	− 89	− 93	− 55	− 28	− 58	− 21	− 30	− 52
18 52	− 38	− 23	− 90	− 82	− 78	− 87	−105	− 52	− 55	− 73	− 35	− 35	− 63
19 52	− 38	− 52	− 95	− 92	− 84	− 88	− 95	− 55	− 58	− 91	− 50	− 41	− 70
20 52	− 49	− 69	−104	−100	− 93	− 80	− 92	− 50	− 80	−108	− 61	− 55	− 78
21 52	− 55	− 79	−101	−115	− 94	− 62	− 94	− 42	− 80	−102	− 55	− 72	− 79
22 52	− 51	− 55	−105	−125	− 85	− 59	− 94	− 34	− 81	− 93	− 55	− 65	− 75
23 52	− 41	− 29	− 90	−110	− 85	− 44	− 98	− 39	− 61	− 89	− 59	− 61	− 67
Range ..	285	270	421	465	342	351	381	281	275	392	351	287	331

TABLE Vc.—*Showing for the quiet days locally selected the means diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1913.*

Unity = 0·1γ = 0·000001 C. G. S.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	− 86	− 79	− 92	−147	−132	−126	− 91	− 94	− 70	− 89	−106	−114	−102
0 51	− 75	− 75	−105	−139	−133	−117	− 92	− 95	− 59	− 84	− 99	− 93	− 97
1 51	− 72	− 80	− 92	−126	−119	−129	− 91	−103	− 46	− 85	− 99	− 80	− 93
2 51	− 78	− 76	− 84	−122	−122	−130	− 98	− 82	− 40	− 76	− 93	− 74	− 90
3 51	− 69	− 73	− 88	−108	−119	−126	− 79	− 91	− 35	− 67	− 85	− 56	− 83
4 51	− 62	− 57	− 91	−104	−114	−114	− 85	− 77	− 38	− 62	− 86	− 49	− 78
5 51	− 56	− 42	− 83	−100	− 95	−112	− 88	− 88	− 48	− 49	− 66	− 36	− 72
6 51	0	− 17	− 42	− 66	− 54	− 62	− 46	− 88	− 64	− 42	− 13	− 1	− 41
7 51	+ 72	+ 40	+ 12	0	+ 29	+ 28	+ 17	− 52	− 52	− 8	+ 66	+ 61	+ 18
8 51	+150	+ 97	+103	+165	+254	+169	+ 89	+ 36	+ 70	+125	+165	+133	+130
9 51	+196	+159	+223	+303	+256	+275	+171	+140	+147	+242	+230	+177	+210
10 51	+212	+206	+282	+347	+317	+329	+250	+214	+169	+280	+250	+186	+253
11 51	+202	+188	+299	+312	+317	+319	+277	+241	+177	+239	+211	+135	+243
12 51	+140	+140	+252	+235	+262	+278	+248	+241	+143	+138	+126	+100	+192
13 51	+ 52	+ 68	+147	+148	+248	+199	+177	+186	+ 75	+ 54	+ 37	+ 47	+120
14 51	+ 6	+ 25	+ 51	+ 77	+ 63	+ 84	+ 82	+125	+ 10	+ 6	− 35	− 1	+ 41
15 51	− 19	− 5	+ 6	+ 27	− 21	− 10	+ 3	+ 63	− 23	− 36	− 55	− 34	− 9
16 51	− 39	− 25	− 59	− 30	−100	− 79	− 74	+ 14	− 33	− 38	− 61	− 41	− 47
17 51	− 40	− 33	−100	− 77	−122	−121	− 98	− 37	− 58	− 68	− 55	− 47	− 71
18 51	− 72	− 44	−105	−116	−119	−120	− 93	− 75	− 59	− 98	− 53	− 38	− 83
19 51	−163	− 60	−109	−124	−131	−116	−103	− 99	− 58	− 97	− 52	− 47	− 97
20 51	− 67	− 80	−111	−131	−131	−108	− 92	−104	− 52	− 3	− 57	− 53	− 82
21 51	− 67	− 90	−103	−127	−123	−110	− 89	−103	− 43	− 99	− 54	− 54	− 88
22 51	− 73	− 87	−106	−115	−114	−111	− 91	− 86	− 36	− 91	− 52	− 51	− 84
23 51	− 71	− 73	− 93	−108	−111	−101	− 85	− 58	− 16	− 76	− 2	− 53	− 71
Range ..	375	296	410	494	450	449	380	345	247	379	356	300	355

TABLE Vd.—*Showing for the quiet days locally selected the mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1914.*

Unity = 0·1γ = 0·000001 C. G. S.

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	− 98	− 89	− 90	−150	− 93	− 73	− 80	− 69	− 85	− 82	−132	−119	− 97
0 51	− 93	− 92	− 94	−151	− 88	− 63	− 91	− 79	− 79	− 49	− 92	−106	− 90
1 51	− 86	− 82	− 77	−131	− 79	− 78	− 80	− 88	− 75	− 50	− 72	− 94	− 83
2 51	− 77	− 76	− 84	−118	− 81	− 80	− 86	− 77	− 79	− 49	− 72	− 89	− 81
3 51	− 68	− 73	− 89	−105	− 82	− 85	− 98	− 79	− 87	− 60	− 77	− 82	− 82
4 51	− 47	− 70	− 74	− 85	− 83	− 88	− 91	− 68	− 85	− 55	− 78	− 73	− 75
5 51	− 30	− 67	− 79	− 88	− 84	− 77	− 77	− 49	− 79	− 53	− 52	− 54	− 66
6 51	− 8	− 33	− 56	− 41	− 57	− 25	− 16	− 37	− 79	− 61	− 19	+ 7	− 35
7 51	+ 32	+ 13	+ 30	+ 16	+ 1	+ 58	+ 62	− 10	− 23	− 23	+ 27	+ 63	+ 20
8 51	+ 84	+ 89	+140	+140	+110	+ 59	+156	+ 90	+ 50	+ 35	+ 86	+133	+ 98
9 51	+125	+184	+220	+260	+189	+208	+226	+151	+147	+102	+146	+200	+180
10 51	+175	+245	+266	+324	+230	+263	+249	+251	+212	+211	+208	+209	+237
11 51	+157	+252	+285	+321	+224	+261	+247	+262	+191	+264	+211	+179	+237
12 51	+125	+188	+218	+265	+189	+204	+211	+258	+159	+220	+184	+134	+196
13 51	+ 76	+106	+121	+184	+127	+105	+158	+216	+116	+117	+113	+ 62	+125
14 51	+ 50	+ 39	+ 47	+103	+ 48	+ 46	+ 93	+ 96	+ 52	+ 3	+ 55	− 9	+ 52
15 51	+ 26	− 17	− 14	+ 22	− 7	− 35	+ 10	− 18	− 16	− 32	− 4	− 26	− 10
16 51	− 15	− 49	− 72	− 40	− 46	− 80	− 62	− 97	− 37	− 45	− 37	− 35	− 51
17 51	− 40	− 74	− 91	− 86	− 66	− 97	−124	−110	− 38	− 49	− 52	− 32	− 72
18 51	− 59	− 80	− 83	−125	− 71	− 97	−130	−118	− 41	− 82	− 64	− 38	− 82
19 51	− 71	− 92	− 89	−107	− 78	− 98	−127	−120	− 32	− 86	− 73	− 49	− 85
20 51	− 62	− 94	−103	−141	− 79	− 91	−129	−102	− 44	− 67	− 62	− 62	− 86
21 51	− 60	− 81	−112	−145	− 73	− 72	−120	−101	− 39	− 64	− 90	− 76	− 86
22 51	− 54	− 68	−114	−140	− 64	− 70	−101	− 91	− 38	− 47	− 78	− 66	− 78
23 51	− 59	− 56	− 97	−113	− 53	− 71	− 86	− 85	− 25	− 83	− 80	− 62	− 72
Range ..	273	346	399	475	323	361	379	382	299	350	343	328	334

TABLE Ve.—*Showing for the quiet days locally selected the mean diurnal inequality of Horizontal Force for each month of the year, and for the whole year 1915.*

Unity = 0·1γ = 0·000001 C. G. S.

1915. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	−102	−133	−135	−155	−121	−169	−194	−138	−187	−124	−146	− 85	−141
0 51	− 89	−111	−141	−151	−133	−150	−186	−155	−169	−135	−139	− 82	−137
1 51	− 92	−107	−134	−152	−120	−164	−170	−153	−161	−137	−129	− 76	−133
2 51	− 82	− 97	−132	−154	−118	−160	−180	−152	−158	−129	−113	− 18	−124
3 51	− 62	− 95	−107	−144	−103	−157	−168	−141	−162	−136	−105	− 75	−121
4 51	− 71	− 82	−131	−129	−107	−156	−165	−140	−123	−118	−106	− 66	−116
5 51	− 40	− 71	−111	−133	−113	−131	−135	−119	−126	−129	− 80	− 52	−103
6 51	− 15	− 68	− 82	−120	− 92	− 63	− 66	− 70	−120	−141	− 52	− 36	− 77
7 51	+ 61	− 19	− 4	− 59	+ 27	+ 30	+ 43	+ 23	− 73	− 62	+ 28	− 9	− 1
8 51	+139	+ 60	+117	+ 87	+185	+169	+146	+153	+108	+103	+139	+ 53	+122
9 51	+198	+145	+272	+249	+268	+281	+281	+287	+274	+256	+264	+113	+241
10 51	+247	+218	+367	+327	+320	+344	+362	+352	+357	+344	+323	+180	+312
11 51	+219	+254	+354	+340	+339	+334	+379	+356	+378	+356	+310	+185	+317
12 51	+162	+225	+260	+327	+297	+299	+339	+296	+335	+287	+216	+130	+264
13 51	+ 66	+156	+178	+235	+202	+211	+272	+200	+236	+180	+113	+ 60	+176
14 51	+ 16	+ 81	+ 90	+141	+ 99	+102	+149	+ 95	+139	+115	+ 43	+ 10	+ 90
15 51	− 27	+ 1	+ 19	+ 68	0	+ 14	+ 20	+ 30	+ 22	+ 24	− 25	− 14	+ 11
16 51	− 65	− 46	− 37	+ 22	− 72	− 84	− 65	− 47	− 56	− 40	− 58	− 35	− 49
17 51	− 85	− 47	− 66	− 42	−115	−135	−115	− 89	− 71	− 59	− 68	− 37	− 77
18 51	− 69	− 39	− 80	−114	−119	−120	−122	−110	−103	− 66	− 63	− 27	− 86
19 51	− 68	− 55	−102	−111	−128	−115	−118	−125	−114	− 84	−102	− 35	− 96
20 51	− 70	− 82	−122	−121	−133	−115	−119	−120	−113	−111	−101	− 37	−104
21 51	− 78	− 70	−142	−116	−132	−102	−117	−124	− 98	−106	− 83	− 34	−100
22 51	− 92	− 69	−138	−110	−130	− 96	−108	−120	− 78	− 95	− 86	− 34	− 96
23 51	− 88	− 51	−110	−113	−126	− 77	−103	−106	− 57	− 92	−103	− 30	− 88
Range ..	349	387	509	495	472	513	573	511	565	497	469	270	458

TABLE V f.—*Showing for the quiet days locally selected the mean diurnal inequality of Horizontal Force for the summer months (April to September), winter months (October to March) and the whole year for each of the years 1911 to 1915.*

Unity = 0·1γ = 0·000001 C. G. S.

Bombay Civil Time.	1911. April to September.	October to March.	Year.	1912. April to September.	October to March.	Year.	1913. April to September.	October to March.	Year.	1914. April to September.	October to March.	Year.	1915. April to September.	October to March.	Year.
H. m.															
0 ..	−101	− 93	− 97	− 96	−103	− 99	−110	− 94	−102	− 92	−102	− 97	−161	−121	−141
1 ..	−102	− 93	− 98	− 90	−103	− 96	−106	− 88	− 97	− 92	− 88	− 90	−157	−116	−137
2 ..	−102	− 88	− 95	− 90	− 92	− 91	−102	− 85	− 93	− 88	− 77	− 83	−153	−112	−133
3 ..	− 95	− 75	− 85	− 88	− 91	− 89	− 99	− 80	− 90	− 87	− 74	− 81	−154	− 95	−124
4 ..	− 92	− 71	− 81	− 90	− 82	− 86	− 93	− 73	− 83	− 89	− 75	− 82	−146	− 96	−121
5 ..	− 92	− 63	− 77	− 86	− 70	− 78	− 89	− 68	− 78	− 83	− 66	− 75	−137	− 96	−116
6 ..	− 88	− 53	− 71	− 84	− 60	− 72	− 88	− 55	− 72	− 76	− 56	− 66	−126	− 80	−103
7 ..	− 52	− 20	− 36	− 57	− 29	− 43	− 63	− 19	− 41	− 42	− 28	− 35	− 88	− 66	− 77
8 ..	+ 14	+ 29	+ 22	− 4	+ 26	+ 11	− 5	+ 40	+ 18	+ 17	+ 24	+ 20	− 2	− 1	− 1
9 ..	+113	+118	+115	+ 95	+ 98	+100	+130	+129	+130	+101	+ 94	+ 98	+141	+102	+122
10 ..	+209	+187	+198	+189	+179	+184	+215	+204	+210	+197	+163	+180	+273	+207	+241
11 ..	+267	+228	+247	+242	+221	+232	+271	+236	+253	+255	+219	+237	+344	+280	+312
12 ..	+264	+219	+242	+242	+212	+227	+274	+212	+243	+251	+225	+237	+354	+279	+317
13 ..	+223	+160	+192	+205	+151	+178	+234	+149	+192	+214	+178	+196	+315	+213	+264
14 ..	+143	+ 91	+117	+128	+ 81	+105	+172	+ 67	+120	+151	+ 99	+125	+226	+125	+176
15 ..	+ 60	+ 37	+ 49	+ 63	+ 34	+ 49	+ 73	+ 9	+ 41	+ 73	+ 31	+ 52	+121	+59	+ 90
16 ..	− 10	− 8	− 9	+ 9	− 2	+ 4	+ 6	− 24	− 9	− 7	− 11	− 10	+ 26	− 3	+ 11
17 ..	− 57	− 38	− 47	− 34	− 26	− 30	− 50	− 44	− 47	− 60	− 42	− 51	− 50	− 47	− 49
18 ..	− 74	− 62	− 68	− 65	− 40	− 52	− 85	− 57	− 71	− 87	− 56	− 72	− 94	− 60	− 77
19 ..	− 85	− 77	− 81	− 76	− 49	− 63	− 97	− 68	− 83	− 97	− 68	− 82	−115	− 57	− 86
20 ..	− 88	− 86	− 87	− 79	− 61	− 70	−105	− 88	− 97	− 94	− 77	− 85	−118	− 74	− 96
21 ..	− 93	− 91	− 92	− 82	− 74	− 78	−103	− 62	− 82	− 98	− 75	− 86	−120	− 87	−104
22 ..	− 93	− 91	− 92	− 81	− 77	− 79	− 99	− 78	− 88	− 92	− 80	− 86	−115	− 85	−100
23 ..	− 83	− 74	− 79	− 80	− 71	− 75	− 92	− 77	− 84	− 84	− 71	− 78	−107	− 86	− 96
24 ..	− 70	− 67	− 69	− 73	− 61	− 67	− 80	− 61	− 71	− 72	− 73	− 72	− 97	− 79	− 88
Range ..	369	321	345	338	324	331	384	330	355	352	327	334	515	401	458

TABLE VIa.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Declination for each month of the year, and for the whole year 1911.*

Unity = 0·01 minute of arc.

1911.	Month.												Year.
Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
H. m.													
4 51	− 34	− 26	− 52	+ 7	+ 60	+ 82	+ 56	+ 46	+ 16	− 16	− 8	− 31	+ 8
5 51	− 50	− 36	− 71	+ 29	+116	+161	+110	+111	+ 45	− 15	− 6	− 28	+ 30
6 51	− 52	− 75	− 58	+102	+196	+191	+215	+221	+158	+ 40	− 14	− 11	+ 76
7 51	− 25	− 73	+ 42	+156	+196	+153	+245	+243	+229	+116	+ 13	+ 43	+111
8 51	+ 25	− 45	+133	+115	+110	+ 87	+154	+159	+192	+100	+ 5	+ 41	+ 90
9 51	+ 40	− 24	+168	+ 28	− 20	− 61	+ 33	+ 4	+ 69	+ 35	− 60	− 22	+ 16
10 51	− 7	− 10	+139	− 68	−143	−178	−110	−110	− 73	− 38	−101	− 90	− 67
11 51	− 54	− 43	+ 39	−140	−209	−266	−197	−201	−207	− 82	− 83	− 77	−127
12 51	− 41	− 2	− 39	−146	−191	−257	−213	−229	−247	− 81	− 25	+ 8	−122
13 51	0	+ 24	− 42	−101	−121	−170	−183	−177	−193	− 48	+ 25	+ 51	− 80
14 51	+ 28	+ 44	− 23	− 27	− 42	− 75	−119	−102	− 95	+ 8	+ 45	+ 63	− 25
15 51	+ 50	+ 64	− 2	+ 35	+ 38	− 23	− 47	− 27	− 7	+ 30	+ 49	+ 56	+ 18
16 51	+ 58	+ 50	− 4	+ 47	+ 33	− 4	− 2	+ 29	+ 35	+ 12	+ 42	+ 23	+ 28
17 51	+ 44	+ 17	+ 7	+ 30	+ 9	+ 26	− 7	+ 14	+ 29	− 6	+ 32	+ 9	+ 17
18 51	+ 35	+ 24	− 8	− 2	− 28	− 4	− 33	− 27	+ 6	− 20	+ 21	+ 11	− 2
19 51	+ 30	+ 20	− 23	− 19	− 45	− 12	− 41	− 28	− 1	− 19	+ 14	+ 7	− 10
20 51	+ 24	+ 36	− 27	− 17	− 31	− 2	− 30	− 23	− 3	− 11	+ 11	− 6	− 7
21 51	+ 16	+ 24	− 25	− 16	− 21	+ 13	− 15	− 16	− 1	− 8	+ 13	− 6	− 3
22 51	+ 6	+ 22	− 27	− 10	+ 1	+ 19	+ 13	+ 2	+ 1	+ 2	+ 13	+ 2	+ 4
23 51	+ 5	+ 25	− 24	− 3	+ 11	+ 48	+ 25	+ 5	+ 8	+ 8	+ 14	+ 7	+ 11
0 51	− 5	+ 13	− 22	− 3	+ 21	+ 53	+ 37	+ 20	+ 12	+ 10	+ 11	+ 1	+ 12
1 51	− 14	+ 8	− 28	+ 1	+ 27	+ 62	+ 40	+ 23	+ 11	+ 3	+ 3	− 6	+ 11
2 51	− 29	− 9	− 31	− 2	+ 24	+ 67	+ 41	+ 35	+ 9	− 1	0	− 16	+ 7
3 51	− 42	− 17	− 39	− 2	+ 20	+ 73	+ 42	+ 36	+ 2	− 16	− 17	− 23	+ 1
4 51	− 54	− 28	− 44	0	+ 30	+ 84	+ 52	+ 44	− 2	− 27	− 16	− 29	+ 1
Range ..	112	139	239	302	405	457	458	472	476	198	150	153	238

TABLE VIb.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Declination for each month of the year, and for the whole year 1912.*

Unity = 0·01 minute of arc.

1912.	Month.												Year.
Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
H. m.													
4 51	− 35	+ 6	− 13	+ 11	+ 69	+ 41	+ 64	+ 34	+ 14	− 8	− 13	− 33	+ 11
5 51	− 38	0	− 17	+ 33	+150	+101	+146	+110	+ 27	− 12	− 19	− 35	+ 37
6 51	− 22	+ 15	+ 9	+127	+201	+195	+223	+192	+118	+ 28	− 34	− 76	+ 81
7 51	+ 32	+ 59	+ 97	+180	+189	+224	+229	+200	+189	+ 80	− 3	− 76	+117
8 51	+110	+ 64	+157	+156	+ 77	+168	+143	+113	+163	+ 49	+ 25	− 35	+ 99
9 51	+ 90	− 23	+167	+ 86	− 76	+ 46	+ 14	+ 4	+ 61	+ 1	− 1	− 24	+ 29
10 51	− 32	−114	+ 69	− 22	−216	− 63	−116	−103	− 48	− 58	− 76	− 23	− 67
11 51	−104	−155	− 64	−151	−264	−197	−191	−153	−163	− 98	− 38	− 4	−132
12 51	− 58	−134	−146	−217	−257	−233	−215	−198	−201	− 77	+ 16	+ 33	−141
13 51	− 12	− 63	−123	−189	−158	−193	−171	−160	−147	− 21	+ 32	+ 51	− 96
14 51	+ 23	+ 17	− 54	−107	− 47	−132	−110	− 89	− 63	+ 24	+ 13	+ 39	− 40
15 51	+ 60	+ 78	+ 5	− 22	+ 44	− 53	− 54	− 8	+ 5	+ 40	− 33	+ 11	+ 7
16 51	+ 47	+ 75	+ 26	+ 25	+ 74	− 4	− 5	+ 37	+ 37	+ 20	+ 19	+ 26	+ 31
17 51	+ 24	+ 41	+ 17	+ 21	+ 53	+ 11	− 7	+ 40	+ 14	+ 6	+ 26	+ 29	+ 23
18 51	+ 24	+ 33	− 3	− 5	− 9	− 14	− 33	− 4	− 17	− 1	+ 8	+ 23	0
19 51	+ 15	+ 25	− 15	− 13	− 21	− 23	− 27	− 21	− 28	0	+ 13	+ 24	− 6
20 51	− 1	+ 13	− 21	− 10	− 14	− 24	− 34	− 16	− 23	+ 2	+ 14	+ 22	− 8
21 51	− 7	+ 13	− 20	− 4	− 4	− 1	− 15	− 16	− 10	+ 4	+ 12	+ 16	− 2
22 51	− 7	+ 12	− 14	+ 9	+ 15	+ 4	+ 3	− 8	− 4	+ 9	+ 20	+ 19	+ 5
23 51	− 7	+ 8	− 7	+ 13	+ 27	+ 22	+ 21	+ 7	+ 4	+ 9	+ 20	+ 21	+ 11
0 51	− 10	+ 10	− 9	+ 25	+ 32	+ 30	+ 29	+ 14	+ 14	+ 10	+ 17	+ 16	+ 15
1 51	− 19	+ 8	− 9	+ 27	+ 36	+ 33	+ 36	+ 16	+ 21	+ 9	+ 8	+ 5	+ 14
2 51	− 26	+ 5	− 14	+ 20	+ 46	+ 35	+ 36	+ 11	+ 24	− 1	− 2	− 5	+ 11
3 51	− 29	− 1	− 17	+ 10	+ 47	+ 35	+ 44	+ 12	+ 14	− 12	− 15	− 23	+ 5
4 51	− 48	− 4	− 16	+ 4	+ 82	+ 48	+ 66	+ 23	+ 5	− 16	− 27	− 33	+ 7
Range ..	214	233	313	397	465	457	444	398	390	178	108	127	258

TABLE VIc.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Declination for each month of the year, and for the whole year 1913.*

Unity = 0·01 minute of arc.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	− 34	− 24	− 19	+ 19	+ 39	+ 49	+ 53	+ 59	+ 41	+ 4	+ 9	− 27	+ 14
5 51	− 52	− 39	− 22	+ 39	+127	+130	+116	+133	+ 83	+ 11	− 12	− 38	+ 40
6 51	− 71	− 61	− 28	+139	+197	+212	+171	+203	+187	+ 63	− 51	− 65	+ 75
7 51	− 5	− 43	+ 46	+175	+199	+217	+179	+179	+221	+141	− 43	− 65	+100
8 51	+ 68	+ 10	+ 81	+148	+117	+127	+131	+ 72	+134	+ 82	− 41	− 44	+ 74
9 51	+ 52	+ 37	+ 67	+146	− 42	+ 3	+ 1	− 54	+ 14	− 34	− 86	− 43	+ 5
10 51	+ 14	+ 19	+ 9	− 75	−155	−121	− 39	−145	−116	−149	−118	− 42	− 76
11 51	− 15	− 19	− 63	−159	−197	−189	−144	−189	−229	−203	− 91	− 40	−128
12 51	− 7	− 4	− 89	−175	−211	−214	−215	−171	−218	−163	− 31	+ 2	−125
13 51	− 10	+ 15	− 38	−131	−145	−155	−195	−125	−156	− 93	+ 33	+ 63	− 78
14 51	− 20	+ 26	+ 27	− 45	− 52	−101	−105	− 60	− 65	− 10	+ 38	+ 87	− 23
15 51	+ 2	+ 20	+ 46	+ 16	+ 33	− 37	− 35	+ 17	+ 14	+ 58	+ 34	+ 67	+ 19
16 51	+ 28	+ 23	+ 37	+ 30	+ 62	+ 4	+ 28	+ 65	+ 32	+ 50	+ 22	+ 36	+ 35
17 51	+ 17	+ 4	+ 12	− 3	+ 40	+ 3	+ 16	+ 34	+ 41	+ 16	+ 27	+ 24	+ 19
18 51	+ 15	+ 4	− 8	− 28	− 16	− 32	− 29	− 19	− 9	+ 15	+ 26	+ 20	− 5
19 51	+ 14	− 2	− 11	− 40	− 24	− 38	− 36	− 29	− 22	+ 14	+ 29	+ 15	− 11
20 51	+ 7	− 2	− 10	− 28	− 22	− 29	− 30	− 25	− 18	+ 17	+ 33	+ 10	− 8
21 51	+ 5	− 3	− 9	− 8	− 12	− 7	− 10	− 20	− 8	+ 23	+ 35	+ 11	− 0
22 51	+ 7	+ 5	− 3	− 1	+ 1	+ 1	+ 6	− 11	+ 5	+ 28	+ 43	+ 10	+ 8
23 51	+ 10	+ 11	+ 4	+ 14	+ 8	+ 15	+ 7	+ 1	+ 15	+ 32	+ 48	+ 9	+ 14
0 51	+ 5	+ 15	+ 3	+ 23	+ 15	+ 31	+ 26	+ 14	+ 18	+ 33	+ 41	+ 10	+ 19
1 51	+ 1	+ 12	+ 0	+ 27	+ 19	+ 35	+ 40	+ 24	+ 20	+ 27	+ 34	+ 11	+ 21
2 51	− 12	+ 3	− 13	+ 27	+ 16	+ 37	+ 42	+ 27	+ 22	+ 23	+ 28	+ 4	+ 17
3 51	− 24	− 9	− 17	+ 9	+ 19	+ 45	+ 34	+ 29	+ 17	+ 15	+ 8	− 15	+ 9
4 51	− 46	− 24	− 21	+ 4	+ 30	+ 64	+ 51	+ 48	+ 15	+ 8	+ 4	− 29	+ 9
Range ..	139	98	170	350	410	431	394	392	450	344	166	152	228

TABLE VId.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Declination for each month of the year, and for the whole year 1914.*

Unity = 0.01 minute of arc.

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	− 21	− 16	− 29	− 14	+ 31	+ 40	+ 56	+ 52	+ 56	− 3	− 26	− 32	+ 8
5 51	− 36	− 31	− 20	− 2	+108	+ 84	+127	+135	+112	+ 6	− 33	− 43	+ 34
6 51	− 53	− 32	+ 30	+ 82	+201	+179	+191	+226	+223	+ 52	− 54	− 84	+ 80
7 51	− 37	− 16	+108	+156	+231	+223	+195	+251	+257	+132	− 30	− 67	+117
8 51	− 32	− 9	+178	+174	+149	+167	+151	+155	+154	+159	− 3	− 17	+102
9 51	− 54	− 40	+199	+117	− 4	+ 32	+ 38	− 17	− 23	+ 75	+ 19	+ 44	+ 32
10 51	− 70	− 97	+142	+ 30	−128	− 84	− 90	−167	−158	− 63	− 33	+ 51	− 56
11 51	− 40	−108	− 32	− 76	−216	−212	−208	−245	−250	−162	− 61	+ 42	−130
12 51	+ 22	− 54	−142	−108	−230	−233	−203	−253	−242	−134	− 24	+ 27	−131
13 51	+ 98	+ 33	−125	−109	−166	−178	−176	−186	−168	− 51	+ 8	+ 25	− 83
14 51	+120	+ 97	− 52	− 47	− 69	− 99	−154	− 89	− 71	+ 35	+ 22	+ 4	− 25
15 51	+ 85	+134	− 2	+ 14	+ 2	− 35	− 72	+ 10	+ 12	+ 73	+ 19	+ 12	+ 21
16 51	+ 10	+ 74	+ 1	+ 22	+ 33	+ 1	− 5	+ 81	+ 39	+ 51	+ 36	+ 11	+ 29
17 51	− 13	+ 1	− 14	− 5	+ 21	− 3	+ 17	+ 62	+ 11	+ 9	+ 31	+ 13	+ 12
18 51	+ 8	+ 10	− 19	− 25	− 11	− 28	− 11	− 5	− 13	− 2	+ 22	+ 20	− 4
19 51	+ 10	+ 5	− 34	− 37	− 23	− 25	− 19	− 13	− 13	− 15	+ 36	+ 15	− 9
20 51	+ 9	+ 3	− 37	−136	− 17	− 22	− 14	− 22	− 10	− 16	+ 24	+ 16	− 18
21 51	+ 10	+ 1	− 35	− 22	− 7	− 6	− 5	− 14	+ 3	− 16	+ 15	+ 9	− 6
22 51	+ 10	+ 3	− 26	− 9	+ 3	+ 8	+ 7	− 13	+ 9	− 19	+ 22	+ 9	0
23 51	+ 9	+ 8	− 16	− 3	+ 15	+ 23	+ 16	− 4	+ 10	− 19	+ 24	+ 6	+ 6
0 51	0	+ 15	− 15	− 5	+ 19	+ 34	+ 36	+ 3	+ 9	− 23	+ 24	− 1	+ 8
1 51	− 4	+ 11	− 16	+ 3	+ 19	+ 40	+ 39	+ 6	+ 11	− 24	+ 8	− 9	+ 7
2 51	− 12	+ 14	− 20	+ 6	+ 17	+ 45	+ 40	+ 20	+ 15	− 19	− 6	− 19	+ 7
3 51	− 17	+ 6	− 26	− 4	+ 25	+ 41	+ 41	+ 22	+ 25	− 23	− 24	− 25	+ 3
4 51	− 26	− 4	− 32	− 14	+ 31	+ 43	+ 54	+ 47	+ 42	− 26	− 34	− 42	+ 3
Range ..	190	242	341	310	461	456	398	504	507	321	97	135	248

TABLE VIe.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Declination for each month of the year, and for the whole year 1915.*

Unity = 0·01 minute of arc.

1915. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	− 22	− 13	+ 11	+ 4	+ 70	+ 60	+ 79	+ 64	+ 62	+ 8	− 2	− 36	+ 24
5 51	− 39	− 12	+ 25	+ 49	+170	+118	+178	+143	+141	+ 13	+ 5	− 42	+ 63
6 51	− 67	+ 10	+ 56	+159	+218	+218	+274	+258	+299	+ 74	+ 29	− 30	+125
7 51	− 37	+ 49	+105	+241	+203	+254	+249	+266	+311	+116	+ 82	+ 37	+156
8 51	+ 24	+ 41	+104	+217	+127	+185	+137	+168	+169	+ 77	+ 71	+ 78	+116
9 51	+ 28	− 29	+ 50	+108	− 41	+ 44	− 36	+ 9	− 36	− 6	− 11	+ 72	+ 13
10 51	− 32	− 99	− 45	− 49	−161	− 80	−184	−131	−173	− 74	−106	− 17	− 96
11 51	− 48	−142	−118	−213	−234	−170	−260	−205	−291	−137	−137	− 70	−169
12 51	− 16	− 95	−176	−264	−214	−214	−270	−234	−323	−124	− 95	− 23	−171
13 51	+ 7	+ 7	−150	−190	−159	−190	−228	−164	−230	− 46	− 33	+ 13	−114
14 51	+ 36	+ 86	− 46	− 90	− 53	−136	−153	− 75	− 75	+ 36	+ 1	+ 15	− 38
15 51	+ 45	+117	+ 29	+ 5	+ 24	− 70	− 63	− 9	+ 44	+ 69	+ 33	+ 42	+ 22
16 51	+ 1	+ 62	+ 48	+ 43	+ 43	− 12	+ 8	+ 25	+ 91	+ 44	+ 13	+ 25	+ 33
17 51	− 23	− 7	+ 14	+ 21	+ 27	− 10	+ 34	+ 34	+ 20	− 21	− 4	+ 21	+ 9
18 51	+ 3	+ 9	− 6	− 6	− 20	− 14	+ 6	+ 29	− 25	− 15	+ 20	+ 20	− 5
19 51	+ 10	+ 10	− 3	− 30	− 15	− 28	− 9	− 47	− 23	− 14	+ 15	+ 14	− 10
20 51	+ 11	+ 7	+ 3	− 27	− 15	− 23	− 7	− 51	− 19	− 24	+ 5	+ 5	− 11
21 51	+ 20	− 3	− 2	− 14	− 7	− 8	+ 2	− 36	− 14	− 12	+ 4	− 2	− 6
22 51	+ 16	+ 2	+ 20	+ 1	+ 2	+ 3	+ 12	− 26	− 10	+ 1	+ 16	− 5	+ 3
23 51	+ 23	+ 5	+ 23	+ 10	+ 13	+ 10	+ 28	− 9	− 6	+ 10	+ 23	+ 1	+ 11
0 51	+ 21	+ 5	+ 22	+ 12	+ 17	+ 13	+ 45	+ 3	+ 3	+ 15	+ 31	− 9	+ 15
1 51	+ 24	+ 4	+ 19	+ 10	+ 17	+ 14	+ 50	+ 11	+ 19	+ 15	+ 23	− 17	+ 12
2 51	+ 15	− 1	+ 9	+ 5	+ 10	+ 17	+ 57	+ 20	+ 23	+ 5	+ 15	− 30	+ 12
3 51	+ 1	− 7	+ 7	− 1	+ 7	+ 11	+ 56	+ 33	+ 37	− 3	+ 7	− 42	+ 9
4 51	− 17	− 16	+ 13	− 5	+ 29	+ 39	+ 70	+ 44	+ 63	− 11	− 1	− 58	+ 12
Range ..	112	259	281	505	452	468	544	500	634	253	219	148	327

TABLE VIf.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism the mean diurnal inequality of Declination for the summer months (April to September), winter months (October to March), and the whole year, for the each of the years 1911 to 1915.*

Unity = 0·01 minute of arc.

Bombay Civil Time.	1911. April to September.	October to March.	Year.	1912. April to September.	October to March.	Year.	1913. April to September.	October to Mar.	Year.	1914. April to September.	October to March.	Year.	1915. April to September.	October to March.	Year.
H. m.															
5 ..	+ 44	− 28	+ 8	+ 39	− 16	+ 11	+ 43	− 15	+ 14	+ 35	− 21	+ 8	+ 56	− 9	+ 24
6 ..	+ 95	− 34	+ 30	+ 94	− 20	+ 37	+105	− 25	+ 40	+ 94	− 26	+ 34	+134	− 8	+ 63
7 ..	+181	− 28	+ 76	+176	− 13	+ 81	+185	− 35	+ 75	+184	− 23	+ 80	+238	+ 12	+125
8 ..	+204	+ 19	+111	+202	+ 31	+117	+195	+ 5	+100	+219	+ 15	+117	+254	+ 59	+156
9 ..	+136	+ 43	+ 90	+137	+ 62	+ 99	+121	+ 26	+ 74	+158	+ 46	+102	+167	+ 66	+116
10 ..	+ 9	+ 23	+ 16	+ 22	+ 35	+ 29	+ 11	− 1	+ 5	+ 24	+ 40	+ 32	+ 8	+ 17	+ 13
11 ..	−114	− 18	− 67	− 95	− 39	− 67	−108	− 44	− 76	− 96	− 12	− 56	−130	− 62	− 96
12 ..	−203	− 50	−127	−186	− 77	−132	−184	− 72	−128	−200	− 60	−130	−229	−109	−169
13 ..	−214	− 30	−122	−220	− 61	−141	−201	− 49	−125	−211	− 51	−131	−253	− 88	−171
14 ..	−157	+ 2	− 80	−170	− 23	− 96	−151	− 5	− 78	−164	− 2	− 83	−193	− 34	−114
15 ..	− 77	+ 27	− 25	− 91	+ 10	− 40	− 71	+ 25	− 23	− 88	+ 38	− 25	− 97	+ 21	− 38
16 ..	− 5	+ 41	+ 18	− 12	+ 27	+ 7	+ 1	+ 38	+ 19	− 11	+ 53	+ 21	− 11	+ 56	+ 22
17 ..	+ 23	+ 30	+ 28	+ 27	+ 35	+ 31	+ 37	+ 33	+ 35	+ 28	+ 30	+ 29	+ 33	+ 32	+ 33
18 ..	+ 17	+ 17	+ 17	+ 22	+ 24	+ 23	+ 22	+ 17	+ 19	+ 17	+ 4	+ 12	+ 21	− 3	+ 9
19 ..	− 15	+ 10	− 2	− 14	+ 14	0	− 22	+ 12	− 5	− 15	+ 6	− 4	− 15	+ 5	− 5
20 ..	− 24	+ 5	− 10	− 22	+ 10	− 6	− 31	+ 10	− 11	− 22	+ 3	− 9	− 25	+ 5	− 10
21 ..	− 18	+ 4	− 7	− 20	+ 5	− 8	− 25	+ 9	− 8	− 37	0	− 18	− 24	+ 1	− 11
22 ..	− 9	+ 2	− 3	− 8	+ 3	− 2	− 11	+ 10	0	− 8	− 3	− 6	− 13	+ 1	− 6
23 ..	+ 4	+ 3	+ 4	+ 3	+ 6	+ 5	0	+ 15	+ 8	+ 1	0	0	− 3	+ 8	+ 3
0 ..	+ 16	+ 6	+ 11	+ 16	+ 7	+ 11	+ 10	+ 19	+ 14	+ 8	+ 2	+ 6	+ 8	+ 14	+ 11
1 ..	+ 23	+ 1	+ 12	+ 24	+ 6	+ 15	+ 21	+ 18	+ 19	+ 16	0	+ 8	+ 15	+ 14	+ 15
2 ..	+ 27	− 6	+ 11	+ 28	0	+ 14	+ 27	+ 14	+ 21	+ 20	− 6	+ 7	+ 14	+ 11	+ 13
3 ..	+ 29	− 14	+ 7	+ 29	− 7	+ 11	+ 28	+ 5	+ 17	+ 24	− 10	+ 7	+ 22	+ 2	+ 12
4 ..	+ 28	− 26	+ 1	+ 27	− 16	+ 5	+ 25	− 7	+ 9	+ 25	− 18	+ 3	+ 24	− 6	+ 9
5 ..	+ 35	− 33	+ 1	+ 38	− 24	+ 7	+ 35	− 18	+ 9	+ 34	− 27	+ 3	+ 40	− 15	+ 12
Range ..	418	93	238	422	139	258	396	110	228	430	113	248	507	175	327

TABLE VIIa.—*Showing for the quiet days locally selected, the mean diurnal inequality of Declination for each month of the year and for the whole year 1911.*

Unity = 0·01 minute of arc.

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	+ 24	+ 30	− 13	+ 2	+ 13	+ 37	+ 17	+ 5	+ 16	+ 19	+ 13	− 1	+ 13
0 51	+ 9	+ 12	− 13	+ 8	+ 25	+ 46	+ 42	+ 14	+ 22	+ 19	+ 19	− 1	+ 17
1 51	+ 3	+ 22	− 23	+ 7	+ 35	+ 52	+ 44	+ 21	+ 27	+ 16	+ 7	0	+ 18
2 51	− 10	6	− 27	+ 6	+ 30	+ 57	+ 41	+ 34	+ 25	− 1	− 2	− 13	+ 12
3 51	− 27	0	− 38	− 1	+ 30	+ 58	+ 40	+ 41	+ 25	− 8	− 15	− 27	+ 6
4 51	− 46	− 17	− 45	+ 1	+ 44	+ 67	+ 44	+ 47	+ 21	− 16	− 17	− 31	+ 4
5 51	− 69	− 29	− 65	+ 19	+125	+153	+106	+109	+ 49	− 19	− 13	− 21	+ 29
6 51	− 62	− 71	− 61	+ 89	+182	+183	+204	+203	+140	+ 31	− 20	− 4	+ 68
7 51	− 41	− 75	+ 27	+139	+178	+155	+220	+230	+186	+ 83	− 1	+ 51	+ 96
8 51	+ 10	− 47	+120	+120	+116	+ 96	+132	+147	+140	+ 72	− 16	+ 78	+ 81
9 51	+ 41	− 21	+159	+ 29	+ 7	− 36	+ 7	+ 12	+ 27	− 1	− 58	− 33	+ 11
10 51	+ 25	− 14	+136	− 71	−109	−172	−119	−106	− 75	− 64	−107	−128	− 67
11 51	− 31	− 37	+ 40	−142	−185	−245	−180	−191	−187	− 87	− 82	−120	−121
12 51	−35	− 16	− 39	−147	−220	−217	−192	−219	−189	− 65	− 31	− 47	−118
13 51	− 9	+ 2	− 40	− 89	−149	−145	−151	−181	−130	− 20	+ 19	+ 24	− 72
14 51	+ 15	+ 28	− 12	− 19	− 68	− 60	− 94	−100	− 68	+ 27	+ 44	+ 71	− 20
15 51	+ 27	+ 53	+ 6	+ 38	+ 11	− 11	− 44	− 17	− 17	+ 38	+ 65	+ 81	+ 19
16 51	+ 27	+ 46	− 1	+ 49	+ 39	+ 10	− 8	+ 33	0	+ 20	+ 43	+ 49	+ 26
17 51	+ 26	+ 33	+ 2	+ 29	+ 10	+ 11	− 14	+ 25	+ 3	− 2	+ 35	+ 29	+ 16
18 51	+ 33	+ 30	− 11	− 5	− 34	− 11	− 32	− 12	− 3	− 12	+ 38	+ 24	0
19 51	+ 35	+ 21	− 24	− 19	− 33	− 20	− 41	− 24	− 17	− 13	+ 26	+ 15	− 8
20 51	+ 13	+ 25	− 29	− 17	− 25	− 17	− 30	− 29	− 7	− 6	+ 24	+ 8	− 7
21 51	+ 14	+ 13	− 25	− 16	− 15	− 4	− 12	− 25	− 1	− 2	+ 22	+ 2	− 4
22 51	+ 20	+ 15	− 25	− 12	+ 3	+ 13	+ 15	− 15	+ 12	+ 7	+ 15	+ 1	+ 4
23 51	+ 24	+ 20	− 20	− 5	+ 10	+ 27	+ 20	− 9	+ 24	+ 5	+ 17	+ 3	+ 10
Range ..	110	128	224	286	402	428	412	449	375	170	172	209	217

TABLE VIIb.—*Showing for the quiet days locally selected, the mean diurnal inequality of Declination for each month of the year and for the whole year 1912.*

Unity = 0·01 minute of arc.

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	− 2	+ 13	+ 14	+ 23	+ 14	+ 14	+ 11	+ 16	+ 20	+ 12	+ 26	+ 26	+ 16
0 51	− 3	+ 15	+ 12	+ 33	+ 13	+ 24	+ 16	+ 25	+ 22	+ 11	+ 22	+ 26	+ 18
1 51	− 14	+ 11	+ 9	+ 30	+ 24	+ 31	+ 21	+ 38	+ 29	+ 11	+ 13	+ 16	+ 18
2 51	− 23	+ 12	+ 1	+ 27	+ 28	+ 26	+ 25	+ 41	+ 33	− 5	0	+ 5	+ 14
3 51	− 23	+ 1	− 5	+ 20	+ 26	+ 27	+ 31	+ 41	+ 30	− 12	− 9	− 12	+ 10
4 51	− 34	− 2	− 5	+ 12	+ 47	+ 40	+ 49	+ 49	+ 29	− 27	− 15	− 24	+ 10
5 51	− 40	+ 6	+ 1	+ 44	+132	+123	+132	+127	+ 54	− 28	− 15	− 34	+ 42
6 51	− 33	+ 24	+ 16	+134	+204	+198	+198	+211	+143	+ 20	− 32	− 77	+ 84
7 51	+ 10	+ 60	+ 82	+181	+218	+225	+214	+205	+175	+ 97	− 3	− 86	+115
8 51	+ 45	+ 64	+133	+132	+145	+161	+135	+115	+ 89	+101	+ 12	− 59	+ 89
9 51	+ 17	− 1	+131	+ 38	+ 6	+ 46	+ 19	− 10	− 26	+ 23	− 17	− 45	+ 15
10 51	− 58	− 69	+ 65	− 63	−151	− 57	−102	−121	−112	− 57	− 52	− 33	− 67
11 51	− 91	−136	− 48	−150	−231	−173	−168	−189	−213	−136	− 40	+ 8	−131
12 51	− 34	−128	−141	−185	−248	−204	−168	−220	−212	−108	+ 19	+ 38	−133
13 51	+ 34	− 73	−145	−147	−172	−178	−153	−169	−148	− 27	+ 28	+ 40	− 92
14 51	+ 85	+ 14	− 88	− 90	− 71	−134	− 99	− 99	− 36	+ 33	+ 14	+ 24	− 37
15 51	+ 94	+ 72	− 15	− 32	+ 15	− 58	− 28	− 26	+ 44	+ 58	+ 11	+ 1	+ 11
16 51	+ 41	+ 63	+ 17	+ 21	+ 56	− 8	+ 14	+ 24	+ 65	+ 34	+ 17	+ 23	+ 31
17 51	+ 4	+ 26	+ 13	+ 16	+ 36	− 4	+ 5	+ 32	+ 37	+ 5	+ 16	+ 32	+ 18
18 51	+ 13	+ 20	+ 1	− 9	− 19	− 14	− 33	− 6	+ 3	− 4	+ 7	+ 31	− 1
19 51	+ 15	+ 14	− 10	− 20	− 30	− 29	− 37	− 24	− 10	− 4	+ 1	+ 31	− 9
20 51	+ 4	+ 4	− 15	− 21	− 30	− 32	− 40	− 22	− 11	− 2	0	+ 25	− 12
21 51	+ 3	+ 4	− 12	− 6	− 9	− 22	− 29	− 20	− 1	+ 4	0	+ 23	− 5
22 51	+ 2	+ 4	− 9	+ 8	+ 5	− 7	− 7	− 7	+ 9	+ 8	+ 11	+ 25	+ 4
23 51	− 3	0	− 3	+ 20	+ 14	+ 13	+ 11	+ 13	+ 13	+ 12	+ 15	+ 26	+ 11
Range ..	185	208	278	366	466	429	382	431	388	237	80	126	248

TABLE VIIc.—*Showing for the quiet days locally selected, the mean diurnal inequality of Declination for each month of the year and for the whole year 1913.*

Unity = 0·01 minute of arc.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	− 2	+ 22	+ 4	+ 11	+ 31	+ 15	− 1	+ 20	+ 28	+ 27	+ 27	+ 25	+ 17
0 51	− 2	+ 23	+ 5	+ 11	+ 40	+ 21	+ 11	+ 29	+ 31	+ 26	+ 22	+ 13	+ 19
1 51	− 4	+ 19	− 3	+ 17	+ 37	+ 32	+ 19	+ 36	+ 35	+ 21	+ 19	− 4	+ 19
2 51	− 9	+ 7	− 11	+ 16	+ 36	+ 33	+ 17	+ 39	+ 33	+ 12	+ 9	− 6	+ 15
3 51	− 24	− 8	− 20	+ 6	+ 34	+ 41	+ 26	+ 46	+ 30	− 1	− 3	− 25	+ 8
4 51	− 38	− 24	− 26	− 3	+ 44	+ 54	+ 38	+ 53	+ 45	− 10	− 16	− 30	+ 7
5 51	− 61	− 33	− 35	+ 13	+130	+143	+100	+111	+107	− 10	− 31	− 41	+ 33
6 51	− 81	− 44	− 30	+120	+188	+230	+169	+199	+219	+ 56	− 37	− 72	+ 76
7 51	− 7	− 27	+ 47	+179	+175	+231	+178	+218	+228	+138	− 3	− 54	+109
8 51	+ 85	+ 6	+ 89	+169	+ 82	+134	+131	+ 91	+ 74	+ 96	+ 9	− 27	+ 78
9 51	+ 74	+ 31	+ 64	+ 91	− 65	− 4	+ 21	− 49	− 60	+ 3	− 29	− 6	+ 6
10 51	+ 30	+ 5	+ 31	− 26	−164	−147	− 73	−144	−172	−112	− 76	− 2	− 71
11 51	− 5	− 22	− 39	−135	−209	−223	−156	−216	−260	−155	− 66	− 12	−125
12 51	+ 1	− 5	− 74	−161	−218	−234	−189	−205	−227	−143	− 12	− 14	−123
13 51	− 6	+ 17	− 26	−128	−156	−162	−154	−147	−143	− 93	+ 41	+ 29	− 77
14 51	− 13	+ 9	+ 27	− 63	− 58	−103	− 73	− 62	− 56	− 15	+ 34	+ 61	− 26
15 51	+ 13	− 7	+ 42	− 2	+ 24	− 13	+ 2	− 11	+ 29	+ 53	+ 19	+ 54	+ 17
16 51	+ 23	− 3	+ 31	+ 27	+ 54	+ 23	+ 41	+ 23	+ 59	+ 49	+ 2	+ 38	+ 31
17 51	+ 8	+ 2	+ 10	− 2	+ 37	+ 8	+ 32	+ 19	+ 47	+ 12	+ 16	+ 31	+ 18
18 51	+ 12	+ 5	− 14	− 27	− 9	− 36	− 23	− 13	− 4	+ 6	+ 17	+ 22	− 5
19 51	+ 10	+ 7	− 17	− 42	− 10	− 38	− 35	− 20	− 16	+ 4	+ 17	+ 17	− 10
20 51	0	+ 4	− 24	− 33	− 9	− 26	− 33	− 13	− 12	+ 7	+ 17	+ 6	− 10
21 51	− 1	+ 8	− 22	− 20	− 3	− 4	− 27	− 9	− 4	+ 9	+ 16	+ 4	− 4
22 51	+ 2	+ 13	− 16	− 10	+ 5	+ 13	− 11	+ 10	+ 7	+ 15	+ 17	+ 3	+ 4
23 51	+ 5	+ 14	− 6	+ 1	+ 16	+ 25	− 1	+ 24	+ 13	+ 21	+ 20	+ 3	+ 11
Range ..	166	75	163	340	406	465	367	434	488	293	117	133	234

TABLE VIId.—*Showing for the quiet days locally selected, the mean diurnal inequality of Declination for each month of the year and for the whole year 1914.*

Unity = 0·01 minute of arc.

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	+ 27	+ 21	+ 15	+ 9	+ 26	+ 35	+ 13	0	+ 4	− 12	+ 24	+ 25	+ 16
0 51	+ 21	+ 22	+ 9	+ 16	+ 30	+ 43	+ 26	+ 13	+ 3	− 14	+ 14	+ 19	+ 17
1 51	+ 14	+ 21	+ 5	+ 10	+ 23	+ 52	+ 34	+ 20	+ 9	− 17	+ 12	+ 11	+ 16
2 51	+ 4	+ 21	+ 3	− 1	+ 22	+ 54	+ 36	+ 28	+ 14	− 10	+ 2	− 5	+ 14
3 51	− 6	+ 16	− 2	− 7	+ 22	+ 52	+ 34	+ 26	+ 27	− 9	− 9	− 18	+ 10
4 51	− 11	+ 3	0	− 15	+ 33	+ 63	+ 48	+ 53	+ 48	− 5	− 25	− 30	+ 13
5 51	− 22	− 12	+ 9	− 4	+101	+111	+125	+148	+113	+ 4	− 39	− 41	+ 41
6 51	− 32	− 32	+ 25	+ 91	+185	+173	+187	+246	+230	+ 76	− 33	− 88	+ 86
7 51	− 33	− 34	+ 83	+181	+215	+192	+213	+266	+262	+159	+ 16	− 77	+120
8 51	− 29	− 46	+114	+211	+146	+141	+153	+180	+138	+171	+ 23	− 22	+ 98
9 51	− 42	− 78	+ 95	+147	+ 39	− 5	+ 17	+ 11	− 54	+ 48	0	+ 32	+ 17
10 51	− 89	− 121	+ 47	− 2	− 97	−145	−105	−158	−196	− 85	− 82	+ 36	− 83
11 51	−106	−121	− 57	−112	−208	−245	−193	−253	−282	−168	− 98	+ 88	−150
12 51	− 68	− 54	−127	−147	−220	−241	−185	−304	−288	−145	− 39	+ 27	−149
13 51	+ 17	+ 39	−125	−130	−167	−179	−152	−242	−155	− 63	+ 16	+ 16	− 94
14 51	+ 56	+100	− 47	− 66	− 88	−121	−132	−106	− 15	+ 36	+ 27	− 2	− 30
15 51	+ 93	+121	+ 2	− 2	− 38	− 39	− 72	+ 19	+ 73	+ 63	+ 44	− 2	+ 22
16 51	+ 68	+ 67	+ 13	+ 12	+ 20	+ 8	− 7	+ 85	+ 73	+ 38	+ 37	+ 6	+ 35
17 51	+ 36	+ 13	+ 1	− 9	+ 24	+ 21	+ 27	+ 58	+ 20	+ 1	+ 32	+ 12	+ 20
18 51	+ 25	+ 20	− 16	− 40	− 11	− 2	− 12	− 3	− 7	− 6	+ 20	+ 7	− 2
19 51	+ 23	+ 16	− 24	− 51	− 26	+ 3	− 28	− 12	− 16	− 21	+ 19	+ 16	− 8
20 51	+ 24	+ 12	− 19	− 34	− 21	− 6	− 23	− 28	− 11	− 19	+ 12	+ 16	− 8
21 51	+ 16	+ 4	− 10	− 22	− 9	+ 10	− 14	− 26	− 5	− 14	− 1	+ 14	− 5
22 51	+ 13	+ 9	+ 1	− 16	− 1	+ 24	+ 4	− 19	+ 6	− 13	+ 11	+ 14	+ 3
23 51	+ 24	+ 17	+ 11	− 9	+ 10	+ 50	+ 5	− 13	+ 9	− 3	+ 25	+ 9	+ 11
Range	199	242	241	358	435	437	406	570	550	339	142	126	270

TABLE VIIe.—*Showing for the quiet days locally selected, the mean diurnal inequality of Declination for each month of the year and for the whole year 1915.*

Unity = 0·01 minute of arc.

1915. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	+ 26	+ 14	+ 17	+ 25	+ 17	+ 56	+ 31	+ 2	+ 20	+ 7	+ 49	+ 11	+ 23
0 51	+ 20	+ 15	+ 13	+ 32	+ 27	+ 58	+ 44	+ 15	+ 17	+ 17	+ 54	0	+ 26
1 51	+ 20	+ 6	+ 16	+ 26	+ 16	+ 65	+ 49	+ 26	+ 27	+ 23	+ 49	− 1	+ 27
2 51	+ 10	− 1	+ 3	+ 26	+ 14	+ 60	+ 58	+ 35	+ 28	+ 24	+ 35	− 19	+ 23
3 51	− 4	− 3	− 1	+ 23	+ 24	+ 58	+ 59	+ 44	+ 43	+ 15	+ 28	− 19	+ 22
4 51	− 15	− 8	+ 8	+ 23	+ 38	+ 65	+ 69	+ 67	+ 57	+ 4	+ 11	− 26	+ 24
5 51	− 32	− 6	+ 13	+ 49	+137	+141	+180	+136	+118	+ 12	+ 4	− 30	+ 60
6 51	− 49	+ 14	+ 60	+138	+205	+216	+295	+254	+260	+ 88	− 2	− 17	+122
7 51	− 13	+ 26	+139	+212	+208	+210	+281	+259	+300	+128	− 2	+ 54	+150
8 51	+ 39	+ 3	+159	+200	+135	+143	+172	+147	+168	+ 89	− 53	+ 85	+107
9 51	+ 34	− 40	+110	+117	− 24	− 7	− 48	− 12	− 23	− 4	−108	+ 53	+ 4
10 51	− 37	− 97	− 17	− 45	−124	−150	−224	−128	−146	− 66	−162	− 36	−103
11 51	− 53	−143	−132	−216	−212	−263	−300	−183	−236	−145	−164	− 97	−179
12 51	− 40	− 99	−184	−282	−216	−281	−296	−216	−264	−137	− 73	− 54	−178
13 51	− 19	0	−154	−209	−154	−210	−236	−168	−197	− 47	+ 22	− 9	−115
14 51	+ 16	+ 85	− 58	−118	− 56	−122	−152	−104	− 89	+ 24	+ 77	+ 2	− 41
15 51	+ 36	+124	+ 6	− 28	+ 8	− 60	− 52	− 39	+ 1	+ 63	+ 86	+ 37	+ 15
16 51	+ 8	+ 76	+ 10	+ 6	+ 42	+ 1	+ 29	+ 4	+ 46	+ 34	+ 41	+ 21	+ 26
17 51	− 15	+ 6	− 8	+ 20	+ 26	+ 19	+ 46	+ 31	− 2	− 35	+ 16	+ 7	+ 9
18 51	+ 5	+ 19	− 13	+ 8	− 29	− 11	+ 16	− 23	− 22	− 24	+ 36	+ 16	− 2
19 51	+ 14	+ 11	− 6	− 11	− 31	− 12	− 9	− 42	− 28	− 23	+ 28	+ 14	− 8
20 51	+ 13	+ 6	− 1	− 8	− 26	− 5	− 8	− 49	− 22	− 26	+ 7	+ 8	− 9
21 51	+ 20	− 7	+ 3	+ 1	− 5	+ 8	− 1	− 37	− 17	− 19	+ 6	+ 3	− 4
22 51	+ 20	+ 1	+ 24	+ 6	− 4	+ 28	+ 7	− 26	− 19	− 6	+ 19	+ 1	+ 4
23 51	+ 23	+ 4	+ 18	+ 58	+ 8	+ 42	+ 15	− 1	− 35	+ 6	+ 32	+ 9	+ 15
Range ..	92	267	343	494	424	497	595	475	564	273	250	182	329

TABLE VIIf.—*Showing for the quiet days locally selected, the mean diurnal inequality of Declination for the summer months (April to September), winter months (October to March), and the whole year for each of the years 1911 to 1915.*

Unity = 0·01 minute of arc.

Bombay Civil Time.	1911. April to September.	October to March.	Year.	1912. April to September.	October to March.	Year.	1913. April to September.	October to March.	Year.	1914. April to September.	October to March.	Year.	1915. April to September.	October to March.	Year.
H. m.															
0 ..	+ 15	+ 12	+ 13	+ 16	+15	+ 16	+ 17	+ 17	+ 17	+ 14	+ 17	+ 16	+ 25	+ 21	+ 23
1 ..	+ 26	+ 7	+ 17	+ 22	+ 14	+ 18	+ 24	+ 14	+ 19	+ 22	+ 12	+ 17	+32	+ 20	+ 26
2 ..	+ 31	+ 4	+ 18	+ 29	+ 8	+ 18	+ 29	+ 8	+ 19	+ 25	+ 8	+ 16	+ 35	+ 19	+ 27
3 ..	+ 32	− 8	+ 12	+ 30	− 2	+ 14	+ 29	0	+ 15	+ 25	+ 2	+ 14	+ 37	+ 9	+ 23
4 ..	+ 32	− 19	+ 6	+ 29	− 10	+ 10	+ 30	− 13	+ 8	+ 26	− 5	+ 10	+ 42	+ 3	+ 22
5 ..	+ 37	− 29	+ 4	+ 38	− 18	+ 10	+ 38	− 24	+ 7	+ 38	− 11	+ 13	+ 53	− 4	+ 24
6 ..	+ 93	− 36	+ 29	+102	− 18	+ 42	+101	− 35	+ 33	+ 99	− 17	+ 41	+127	− 6	+ 60
7 ..	+167	− 31	+ 68	+181	− 14	+ 84	+187	− 35	+ 76	+185	− 14	+ 86	+228	+ 16	+122
8 ..	+185	+ 7	+ 96	+203	+ 27	+115	+201	+ 16	+109	+221	+ 19	+120	+245	+ 55	+150
9 ..	+125	+ 36	+ 81	+129	+ 49	+ 89	+113	+ 43	+ 78	+161	+ 35	+ 98	+161	+ 54	+107
10 ..	+ 8	+ 14	+ 11	+ 12	+ 18	+ 15	− 11	+ 23	+ 6	+ 26	+ 9	+ 17	0	+ 7	+ 4
11 ..	−109	− 25	− 67	−101	− 34	− 67	−121	− 21	− 71	−117	− 49	− 83	−136	− 69	−103
12 ..	−188	− 53	−121	−187	− 74	−131	−200	− 50	−125	−215	− 85	−150	−235	−122	−179
13 ..	−197	− 39	−118	−206	− 59	−133	−207	− 41	−123	−231	− 68	−149	−259	− 98	−178
14 ..	−141	− 4	− 72	−161	− 24	− 92	−148	− 6	− 77	−171	− 17	− 94	−196	− 34	−115
15 ..	− 68	+ 29	− 20	− 88	+ 14	− 37	− 69	+ 17	− 26	− 88	+ 28	− 30	−107	+ 24	− 41
16 ..	− 7	+ 45	+ 19	− 14	+ 37	+ 11	+ 5	+ 29	+ 17	− 10	+ 53	+ 22	− 28	+ 59	+ 15
17 ..	+ 20	+ 31	+ 26	+ 29	+ 32	+ 31	+ 38	+ 23	+ 31	+ 32	+ 38	+ 35	+ 21	+ 32	+ 26
18 ..	+ 11	+ 20	+ 16	+ 20	+ 16	+ 18	+ 23	+ 13	+ 18	+ 23	+ 16	+ 20	+ 23	− 5	+ 9
19 ..	− 16	+ 17	0	− 13	+ 11	− 1	− 19	+ 6	− 5	− 12	+ 8	− 2	− 10	+ 6	− 2
20 ..	− 26	+ 10	− 8	− 25	+ 8	− 9	− 27	+ 6	− 10	− 22	+ 5	− 8	− 22	+ 6	− 8
21 ..	− 21	+ 6	− 7	− 26	+ 3	− 12	− 21	+ 2	− 10	− 20	+ 4	− 8	− 20	+ 1	− 9
22 ..	− 12	+ 4	− 4	− 14	+ 4	− 5	− 11	+ 2	− 4	− 11	+ 1	− 5	− 8	+ 1	− 4
23 ..	+ 3	+ 5	+ 4	0	+ 7	+ 4	+ 2	+ 6	+ 4	0	+ 6	+ 3	− 1	+ 10	+ 4
24 ..	+ 11	+ 8	+ 10	+ 14	+ 8	+ 11	+ 13	+ 9	+ 11	+ 9	+ 14	+ 11	+ 14	+ 15	+ 15
Range ..	382	98	217	409	123	248	408	93	234	452	138	270	504	181	329

TABLE VIIIa.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Vertical Force for each month of the year, and for the whole year 1911.*

Unity = 0·1γ = 0·000001 C. G. S.

1911. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 50	+ 8	− 3	+ 19	+ 32	+ 69	+ 66	+ 57	+ 44	+ 64	+ 28	− 39	+ 29	+ 31
5 50	+ 13	− 9	+ 13	+ 59	+108	+106	+112	+ 97	+ 98	+ 38	− 32	+ 40	+ 54
6 50	+ 30	− 25	+ 35	+ 91	+ 91	+ 58	+122	+ 97	+152	+100	− 36	+ 47	+ 63
7 50	+ 65	− 10	+ 80	+ 25	+ 21	0	+ 22	+ 23	+ 89	+ 86	− 41	+ 49	+ 34
8 50	+ 55	+ 40	+ 86	− 65	− 79	− 85	− 86	− 86	− 40	− 22	− 85	− 12	− 32
9 50	− 22	+ 33	+ 19	−126	−142	−164	−171	−166	−158	−108	−123	− 66	− 09
10 50	− 95	+ 3	− 37	−148	−168	−190	−182	−206	−243	−136	− 75	− 71	−129
11 50	−115	+ 27	− 77	−127	−172	−155	−159	−187	−245	−119	+ 6	+ 11	−109
12 50	− 43	+ 64	− 69	− 60	− 85	− 75	−103	−106	−155	− 50	+ 68	+ 84	− 44
13 50	+ 12	+ 56	− 28	+ 3	− 13	+ 5	− 38	− 1	− 51	+ 3	+ 69	+ 80	+ 8
14 50	+ 43	+ 57	+ 1	+ 44	+ 42	+ 46	+ 30	+ 49	+ 32	+ 41	+ 58	+ 67	+ 42
15 50	+ 53	+ 48	+ 4	+ 64	+ 54	+ 43	+ 53	+ 64	+ 67	+ 38	+ 40	+ 44	+ 48
16 50	+ 39	+ 14	+ 1	+ 32	+ 19	+ 46	+ 40	+ 48	+ 45	0	+ 20	− 1	+ 26
17 50	+ 16	− 5	+ 4	+ 9	− 8	+ 22	+ 17	+ 12	+ 11	− 8	+ 16	+ 6	+ 8
18 50	+ 17	− 1	− 22	− 3	− 6	+ 5	− 2	+ 3	+ 5	− 3	+ 16	+ 11	+ 2
19 50	+ 10	− 3	− 17	− 1	+ 2	+ 12	+ 8	+ 18	+ 12	+ 5	+ 17	+ 6	+ 6
20 50	− 1	− 8	− 8	+ 8	+ 21	+ 21	+ 26	+ 29	+ 19	+ 9	+ 17	− 5	+ 11
21 50	− 3	− 24	− 1	+ 19	+ 32	+ 28	+ 39	+ 31	+ 33	+ 15	+ 23	− 5	+ 16
22 50	− 7	− 29	+ 6	+ 22	+ 40	+ 34	+ 44	+ 46	+ 44	+ 15	+ 20	− 18	+ 18
23 50	− 7	− 31	+ 6	+ 26	+ 41	+ 33	+ 40	+ 43	+ 48	+ 20	+ 19	− 25	+ 18
0 50	− 11	− 39	+ 2	+ 24	+ 39	+ 38	+ 42	+ 39	+ 45	+ 20	+ 15	− 36	+ 15
1 50	− 7	− 46	+ 1	+ 21	+ 36	+ 35	+ 33	+ 40	+ 47	+ 19	+ 10	− 57	+ 11
2 50	− 21	− 50	− 5	+ 18	+ 33	+ 39	+ 31	+ 35	+ 49	+ 13	+ 3	− 65	+ 7
3 50	− 19	− 53	− 5	+ 26	+ 29	+ 36	+ 23	+ 30	+ 41	+ 11	0	− 68	+ 4
4 50	− 13	− 55	− 4	+ 32	+ 41	+ 53	+ 35	+ 43	+ 41	+ 16	+ 2	− 71	+ 10
Range ..	180	119	163	239	280	296	304	303	397	236	192	155	192

TABLE VIIIb.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Vertical Force for each month of the year, and for the whole year 1912.*

Unity = 0·1γ = 0·000001 C. G. S.

1912. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 50	− 23	+ 45	+ 31	+ 29	+ 65	+ 39	+ 41	+ 46	+ 44	+ 14	− 3	+ 21	+ 29
5 50	− 17	+ 49	+ 36	+ 42	+107	+ 87	+ 97	+108	+ 71	+ 26	− 8	+ 29	+ 52
6 50	+ 15	+ 63	+ 72	+ 94	+ 94	+103	+ 89	+ 88	+132	+ 65	+ 6	− 2	+ 68
7 50	+ 51	+ 74	+ 87	+ 74	+ 13	+ 46	+ 43	+ 16	+ 76	+ 44	+ 36	+ 43	+ 50
8 50	+ 72	+ 16	+ 58	+ 11	− 69	− 70	− 54	− 87	− 48	− 42	+ 26	+ 68	− 10
9 50	− 31	−115	− 18	− 55	−127	−183	−146	−160	−128	−100	− 19	+ 45	− 86
10 50	−112	−145	−147	−128	−150	−267	−185	−155	−191	−130	− 37	+ 35	−134
11 50	− 81	−100	−191	−145	−123	−207	−148	−105	−196	−110	+ 5	+ 26	−115
12 50	− 8	− 16	−161	− 85	− 46	−139	− 92	− 79	−115	− 55	+ 8	+ 37	− 63
13 50	+ 44	+ 47	− 58	− 16	+ 13	− 38	− 2	+ 1	− 17	− 3	− 20	+ 26	− 2
14 50	+ 62	+ 67	+ 36	+ 24	+ 56	+ 24	+ 29	+ 43	+ 35	+ 6	− 29	− 27	+ 27
15 50	+ 69	+ 67	+ 56	+ 39	+ 79	+ 56	+ 76	+ 70	+ 41	− 4	− 18	− 17	+ 43
16 50	+ 30	+ 19	+ 38	+ 37	+ 55	+ 59	+ 54	+ 48	+ 10	− 20	+ 6	+ 7	+ 29
17 50	+ 21	− 10	+ 11	+ 6	+ 5	+ 49	+ 10	+ 12	− 1	− 3	+ 9	− 2	+ 9
18 50	+ 22	+ 6	0	0	− 31	+ 24	− 10	− 7	− 5	+ 1	+ 5	− 6	0
19 50	+ 11	+ 1	+ 7	− 1	− 22	+ 28	0	+ 4	+ 12	+ 11	+ 6	− 4	+ 4
20 50	− 2	− 5	+ 16	+ 7	− 12	+ 34	+ 10	+ 13	+ 23	+ 23	+ 6	− 14	+ 8
21 50	− 5	− 6	+ 22	+ 11	+ 13	+ 52	+ 20	+ 19	+ 34	+ 33	+ 7	− 19	+ 15
22 50	− 13	− 4	+ 29	+ 24	+ 24	+ 53	+ 28	+ 24	+ 43	+ 36	+ 12	− 22	+ 19
23 50	− 14	− 4	+ 28	+ 21	+ 17	+ 54	+ 32	+ 25	+ 40	+ 37	+ 13	− 23	+ 19
0 50	− 17	− 9	+ 19	+ 12	+ 17	+ 54	+ 27	+ 27	+ 42	+ 38	+ 6	− 31	+ 15
1 50	− 26	− 6	+ 15	+ 15	+ 12	+ 50	+ 26	+ 22	+ 41	+ 36	+ 3	− 39	+ 12
2 50	− 26	− 5	+ 9	+ 5	+ 14	+ 46	+ 26	+ 20	+ 35	+ 36	− 6	− 46	+ 9
3 50	− 24	− 2	+ 11	− 1	+ 15	+ 44	+ 32	+ 24	+ 30	+ 36	− 13	− 50	+ 8
4 50	− 32	+ 4	+ 16	+ 8	+ 36	+ 60	+ 47	+ 32	+ 31	+ 42	− 9	− 51	+ 15
Range ..	184	219	278	239	257	370	282	268	328	195	73	119	202

The result for April 1912 is derived from 4 days only as one day—the 28th is rejected owing to the adjustment of the Vertical Form Magnetograph on that day.

TABLE VIIIc.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Vertical Force for each month of the year, and for the whole year 1913.*

Unity = 0·1γ = 0·000001 C. G. S.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	− 24	− 8	− 2	+ 24	+ 53	+ 59	+ 60	+ 12	+ 50	+ 28	+ 23	− 20	+ 21
5 51	− 27	− 10	− 2	+ 52	+108	+117	+ 98	+ 64	+ 98	+ 46	+ 10	− 27	+ 44
6 51	− 22	− 13	+ 35	+ 76	+ 78	+ 99	+ 91	+ 35	+121	+ 91	+ 3	− 48	+ 45
7 51	+ 25	+ 14	+ 52	− 6	− 5	+ 17	+ 53	− 41	+ 28	+ 37	− 6	− 49	+ 10
8 51	− 1	+ 24	+ 32	−118	−112	−106	− 52	− 20	−111	− 97	− 31	− 44	− 53
9 51	− 92	+ 4	− 14	−196	−226	−179	−119	−155	−194	−161	− 81	− 43	−121
10 51	− 97	− 15	− 24	−214	−200	−191	−126	−145	−228	−194	− 47	− 26	−126
11 51	−108	− 42	− 42	−170	−169	−172	−137	− 95	−167	−142	+ 15	− 5	−103
12 51	− 76	− 15	− 10	− 76	−104	− 91	− 93	− 31	− 57	− 44	+ 89	+ 34	− 39
13 51	− 34	− 6	+ 36	− 6	+ 16	− 12	− 16	+ 31	+ 10	+ 30	+ 92	+ 58	+ 17
14 51	− 4	− 10	+ 57	+ 64	+ 88	+ 33	+ 37	+ 67	+ 56	+ 61	+ 54	+ 31	+ 44
15 51	+ 32	− 4	+ 24	+ 76	+113	+ 69	+ 54	+ 85	+ 69	+ 67	+ 23	+ 6	+ 51
16 51	+ 40	0	− 9	+ 51	+ 82	+ 55	+ 59	+ 54	+ 26	+ 22	+ 3	− 4	+ 32
17 51	+ 34	− 3	− 19	+ 18	+ 24	+ 23	+ 6	− 4	+ 8	+ 18	+ 18	+ 11	+ 11
18 51	+ 38	+ 2	− 25	+ 14	0	− 16	− 21	− 6	+ 8	+ 24	+ 10	+ 13	+ 3
19 51	+ 46	+ 4	− 21	+ 21	+ 18	+ 3	− 6	+ 1	+ 18	+ 30	+ 6	+ 11	+ 11
20 51	+ 40	+ 7	− 12	+ 35	+ 29	+ 22	+ 7	+ 13	+ 27	+ 28	− 3	+ 12	+ 17
21 51	+ 36	+ 6	− 7	+ 46	+ 36	+ 30	+ 16	+ 22	+ 33	+ 30	− 6	+ 12	+ 21
22 51	+ 39	+ 18	+ 5	+ 56	+ 38	+ 36	+ 21	+ 26	+ 39	+ 29	− 7	+ 15	+ 26
23 51	+ 39	+ 19	+ 1	+ 59	+ 36	+ 42	+ 16	+ 29	+ 41	+ 26	− 13	+ 12	+ 26
0 51	+ 32	+ 13	− 4	+ 52	+ 34	+ 44	+ 21	+ 34	+ 38	+ 26	− 23	+ 12	+ 23
1 51	+ 26	+ 12	− 9	+ 50	+ 28	+ 42	+ 21	+ 28	+ 35	+ 16	− 29	+ 9	+ 19
2 51	+ 24	+ 4	− 13	+ 45	+ 23	+ 38	+ 17	+ 32	+ 34	+ 9	− 35	+ 8	+ 15
3 51	+ 23	+ 3	− 19	+ 35	+ 21	+ 44	+ 9	+ 33	+ 26	+ 15	− 40	+ 6	+ 13
4 51	+ 22	+ 1	− 19	+ 44	+ 36	+ 53	+ 22	+ 52	+ 32	+ 21	− 34	+ 6	+ 20
Range ..	154	66	99	290	339	308	235	240	349	285	173	107	177

TABLE VIIId.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Vertical Force for each month of the year, and for the whole year 1914.*

Unity = 0·1γ = 0·000001 C. G. S.

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	− 30	− 5	+ 24	+ 36	+ 41	+ 46	+ 27	+ 52	+ 71	+ 8	0	+ 31	+ 25
5 51	− 32	− 10	+ 39	+ 68	+ 95	+ 93	+ 66	+102	+113	+ 21	+ 1	+ 30	+ 49
6 51	− 47	+ 1	+ 81	+107	+ 92	+109	+ 51	+ 99	+142	+ 84	+ 5	+ 17	+ 62
7 51	− 33	− 12	+ 74	+ 77	+ 10	+ 48	− 8	+ 20	+ 36	+ 81	+ 11	+ 64	+ 31
8 51	− 35	− 33	+ 37	+ 15	−119	− 67	− 66	−118	−119	− 22	− 1	+ 87	− 37
9 51	− 19	−105	− 8	− 61	−225	−160	−146	−197	−203	−154	− 24	+ 55	−104
10 51	+ 2	−109	−101	−130	−205	−176	−178	−204	−231	−207	− 84	+ 21	−133
11 51	+ 43	− 29	−188	−147	−162	−172	−177	−175	−183	−175	− 76	− 17	−121
12 51	+ 94	+ 62	−133	− 90	− 75	−109	− 92	− 72	− 64	− 42	− 27	− 37	− 49
13 51	+108	+104	− 39	− 39	+ 9	− 31	− 51	+ 6	+ 14	+ 45	− 5	− 30	+ 8
14 51	+ 75	+108	+ 27	+ 22	+ 49	+ 16	+ 22	+ 78	+ 80	+ 72	+ 11	− 12	+ 46
15 51	+ 17	+ 56	+ 28	+ 38	+ 64	+ 68	+ 76	+110	+ 86	+ 59	+ 16	− 5	+ 51
16 51	− 36	− 12	+ 4	+ 20	+ 45	+ 43	+ 80	+ 84	+ 36	+ 4	+ 12	− 3	+ 23
17 51	0	− 23	+ 12	− 12	+ 21	+ 11	+ 41	+ 11	− 2	− 6	+ 9	+ 8	+ 6
18 51	+ 12	+ 10	+ 2	− 9	+ 16	+ 3	+ 9	− 25	− 7	+ 2	+ 7	+ 7	+ 2
19 51	+ 4	+ 5	− 1	− 5	+ 22	+ 20	+ 26	+ 6	+ 8	+ 10	+ 17	+ 4	+ 10
20 51	− 6	+ 12	+ 9	+ 12	+ 31	+ 22	+ 29	+ 15	+ 20	+ 15	+ 13	− 8	+ 14
21 51	− 7	+ 10	+ 22	+ 18	+ 41	+ 33	+ 33	+ 24	+ 24	+ 21	+ 12	− 12	+ 18
22 51	− 9	+ 3	+ 28	+ 23	+ 49	+ 39	+ 44	+ 29	+ 30	+ 32	+ 21	− 16	+ 23
23 51	− 13	+ 6	+ 33	+ 25	+ 45	+ 37	+ 43	+ 32	+ 34	+ 34	+ 33	− 19	+ 24
0 51	− 14	+ 1	+ 26	+ 21	+ 38	+ 40	+ 45	+ 45	+ 32	+ 31	+ 18	− 27	+ 21
1 51	− 23	− 9	+ 17	+ 15	+ 40	+ 37	+ 46	+ 28	+ 34	+ 25	+ 15	− 33	+ 16
2 51	− 23	− 8	+ 17	+ 10	+ 35	+ 33	+ 41	+ 20	+ 31	+ 25	− 6	− 34	+ 12
3 51	− 21	− 19	+ 5	− 3	+ 38	+ 27	+ 39	+ 27	+ 34	+ 30	+ 11	− 45	+ 10
4 51	− 19	− 20	+ 17	− 2	+ 50	+ 37	+ 49	+ 43	+ 47	+ 34	+ 21	− 41	+ 18
Range ..	155	217	269	254	320	285	258	314	373	291	117	132	195

The result for June 1914 is derived from 4 days only as one day the 13th is rejected owing to the adjustment of the Vertical Force Magnetograph on that day.

TABLE VIIIe.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Vertical Force for each month of the year, and for the whole year 1915.*

Unity = 0·1γ 0·000001 C. G. S.

1915. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
4 51	+ 43	− 35	+ 19	+115	+ 70	+ 49	+ 73	+ 86	+ 66	− 12	− 5	− 13	+ 38
5 51	+ 38	− 23	+ 34	+143	+108	+116	+149	+141	+141	+ 28	+ 6	− 1	+ 73
6 51	+ 29	− 9	+ 57	+160	+ 57	+133	+124	+159	+119	+ 58	+ 31	+ 19	+ 78
7 51	+ 61	− 35	+ 47	+ 59	− 18	+ 85	+ 35	+ 58	− 41	− 16	+ 29	+ 41	+ 25
8 51	+ 62	−108	− 15	− 92	−104	− 29	− 93	− 55	−237	−107	− 19	+ 26	− 64
9 51	− 19	−168	− 71	−218	−196	−136	−177	−156	−336	−176	− 99	− 55	−151
10 51	− 59	−166	−130	−287	−187	−199	−165	−141	−346	−175	−111	− 99	−172
11 51	− 18	−100	−173	−281	−148	−189	−115	−114	−266	−162	− 55	− 68	−141
12 51	+ 35	+ 14	−136	−177	− 46	+ 6	− 84	− 41	−116	− 61	+ 18	+ 8	− 48
13 51	+ 9	+ 94	− 41	− 50	+ 18	+ 3	− 21	+ 3	+ 22	+ 16	+ 28	+ 11	+ 8
14 51	+ 18	+116	+ 32	+ 49	+ 52	+ 54	+ 47	+ 5	+120	+ 57	+ 18	+ 12	+ 48
15 51	− 4	+ 84	+ 33	+ 74	+ 64	+ 77	+ 82	+ 13	+127	+ 42	+ 13	+ 16	+ 52
16 51	− 35	− 1	− 5	+ 48	+ 26	+ 65	+ 80	+ 8	+ 71	− 12	− 9	+ 6	+ 20
17 51	− 19	− 19	− 18	+ 15	0	+ 29	+ 39	− 8	− 5	− 22	0	+ 20	+ 1
18 51	+ 4	+ 22	− 1	+ 9	− 18	− 9	− 10	− 39	+ 28	+ 10	+ 13	+ 21	+ 2
19 51	+ 4	+ 23	+ 14	+ 29	+ 6	− 7	− 12	− 33	+ 46	+ 13	+ 4	+ 16	+ 9
20 51	+ 1	+ 18	+ 24	+ 42	+ 18	+ 3	− 2	− 8	+ 53	+ 28	+ 1	+ 11	+ 16
21 51	0	+ 29	+ 34	+ 55	+ 36	+ 13	+ 5	+ 10	+ 61	+ 47	+ 11	+ 17	+ 26
22 51	− 3	+ 42	+ 51	+ 57	+ 38	+ 15	+ 13	+ 20	+ 72	+ 70	+ 22	+ 21	+ 35
23 51	− 8	+ 38	+ 51	+ 58	+ 39	+ 17	+ 19	+ 27	+ 72	+ 72	+ 26	+ 12	+ 35
0 51	− 14	+ 40	+ 48	+ 59	+ 45	+ 6	+ 13	+ 28	+ 82	+ 70	+ 26	+ 2	+ 34
1 51	− 24	+ 37	+ 45	+ 58	+ 41	− 1	+ 10	+ 27	+ 83	+ 68	+ 13	− 4	+ 29
2 51	− 31	+ 39	+ 43	+ 54	+ 44	+ 4	+ 8	+ 23	+ 84	+ 62	+ 15	− 11	+ 28
3 51	− 34	+ 38	+ 44	+ 55	+ 47	+ 5	+ 5	+ 18	+ 94	+ 61	+ 14	− 13	+ 28
4 51	− 39	+ 44	+ 51	+ 62	+ 76	+ 21	+ 18	+ 31	+100	+ 69	+ 23	0	+ 38
Range ..	121	284	230	447	304	332	326	315	487	248	142	140	250

TABLE VIIIf.—*Showing for the quiet days selected by the International Commission of Terrestrial Magnetism, the mean diurnal inequality of Vertical Force for the summer months (April to September), winter months (October to March) and for the whole year for each of the years 1911 to 1915.*

Unity = 0·1γ = 0·000001 C. G. S.

Bombay Civil Time.	1911. April to September.	October to March.	Year.	1912. April to September.	October to March.	Year.	1913. April to September.	October to March.	Year.	1914. April to September.	October to March.	Year.	1915. April to September.	October to March.	Year.
H. m.															
5 ..	+ 55	+ 7	+ 31	+ 44	+ 14	+ 29	+ 43	0	+ 21	+ 45	+ 5	+ 25	+ 76	0	+ 38
6 ..	+ 97	+ 10	+ 54	+ 85	+ 19	+ 52	+ 89	− 2	+ 44	+ 89	+ 8	+ 49	+133	+ 14	+ 73
7 ..	+102	+ 25	+ 63	+100	+ 36	+ 68	+ 83	+ 8	+ 45	+100	+ 23	+ 62	+125	+ 31	+ 78
8 ..	+ 30	+ 38	+ 34	+ 45	+ 56	+ 50	+ 8	+ 12	+ 10	+ 30	+ 31	+ 31	+ 30	+ 21	+ 25
9 ..	− 74	+ 10	− 32	− 53	+ 33	− 10	− 86	− 19	− 53	− 79	+ 5	− 37	−102	− 27	− 64
10 ..	−154	− 44	− 99	−133	− 40	− 86	−178	− 64	−121	−165	− 42	−104	−203	− 98	−151
11 ..	−189	− 68	−129	−179	− 89	−134	−184	− 67	−126	−187	− 80	−133	−221	−123	−172
12 ..	−174	− 43	−109	−154	− 75	−115	−152	− 54	−103	−169	− 74	−121	−185	− 96	−141
13 ..	− 97	+ 9	− 44	− 93	− 32	− 63	− 75	− 4	− 39	− 84	− 14	− 49	− 76	− 20	− 48
14 ..	− 16	+ 32	+ 8	− 10	+ 6	− 2	+ 4	+ 29	+ 17	− 15	+ 30	+ 8	− 4	+ 19	+ 8
15 ..	+ 40	+ 44	+ 42	+ 35	+ 19	+ 27	+ 57	+ 31	+ 44	+ 44	+ 47	+ 46	+ 54	+ 42	+ 48
16 ..	+ 57	+ 38	+ 48	+ 60	+ 25	+ 43	+ 78	+ 25	+ 51	+ 74	+ 28	+ 51	+ 73	+ 31	+ 52
17 ..	+ 40	+ 12	+ 26	+ 44	+ 13	+ 29	+ 54	+ 9	+ 32	+ 51	− 5	+ 23	+ 50	− 9	+ 20
18 ..	+ 10	+ 5	+ 8	+ 13	+ 4	+ 9	+ 12	+ 10	+ 11	+ 12	0	+ 6	+ 12	− 10	+ 1
19 ..	0	+ 3	+ 2	− 5	+ 5	0	− 3	+ 10	+ 3	− 2	+ 7	+ 2	− 6	+ 11	+ 2
20 ..	+ 8	+ 3	+ 6	+ 3	+ 5	+ 4	+ 9	+ 13	+ 11	+ 13	+ 6	+ 10	+ 5	+ 12	+ 9
21 ..	+ 21	+ 1	+ 11	+ 12	+ 4	+ 8	+ 22	+ 12	+ 17	+ 21	+ 6	+ 14	+ 18	+ 14	+ 16
22 ..	+ 30	+ 1	+ 16	+ 25	+ 5	+ 15	+ 30	+ 12	+ 21	+ 29	+ 8	+ 18	+ 30	+ 23	+ 26
23 ..	+ 38	− 2	+ 18	+ 33	+ 6	+ 19	+ 36	+ 16	+ 26	+ 36	+ 10	+ 23	+ 36	+ 34	+ 35
0 ..	+ 38	− 3	+ 18	+ 31	+ 6	+ 19	+37	+ 14	+ 26	+ 36	+ 12	+ 24	+ 39	+ 32	+ 35
1 ..	+ 38	− 8	+ 15	+ 30	+ 1	+ 15	+ 37	+ 9	+ 23	+ 37	+ 6	+ 21	+ 39	+ 29	+ 34
2 ..	+ 35	− 13	+ 11	+ 28	− 3	+ 12	+ 34	+ 4	+ 19	+ 33	− 1	+ 16	+ 36	+ 22	+ 29
3 ..	+ 34	− 21	+ 7	+ 24	− 6	+ 9	+ 31	0	+ 15	+ 28	− 5	+ 12	+ 36	+ 19	+ 28
4 ..	+ 31	− 22	+ 4	+ 24	− 7	+ 8	+ 28	− 2	+ 13	+ 27	− 6	+ 10	+ 37	+ 18	+ 28
5 ..	+ 41	− 21	+ 10	+ 36	− 5	+ 15	+ 40	0	+ 20	+ 37	− 1	+ 18	+ 51	+ 25	+ 38
Range ..	291	112	192	279	145	202	273	98	177	287	127	195	354	165	250

TABLE IX*a*.—*Showing for the quiet days selected locally, the mean diurnal inequality of Vertical Force for each month of the year and for the whole year 1911.*

Unity = 0·1γ = 0·000001 C. G. S.

1911. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 50	+ 25	+ 43	+ 17	+ 46	+ 46	+ 56	+ 50	+ 38	+ 73	+ 32	+ 24	+ 16	+ 39
0 50	+ 16	+ 33	+ 9	+ 41	+ 44	+ 56	+ 49	+ 36	+ 72	+ 33	+ 26	+ 15	+ 36
1 50	+ 14	+ 28	+ 5	+ 35	+ 42	+ 53	+ 44	+ 39	+ 62	+ 31	+ 22	+ 11	+ 32
2 50	+ 12	+ 18	− 5	+ 30	+ 33	+ 57	+ 38	+ 34	+ 56	+ 27	+ 19	+ 2	+ 27
3 50	+ 11	+ 12	− 7	+ 33	+ 36	+ 56	+ 32	+ 26	+ 52	+ 21	+ 19	− 2	+ 24
4 50	+ 10	+ 9	− 6	+ 41	+ 52	+ 70	+ 42	+ 39	+ 55	+ 28	+ 21	+ 3	+ 30
5 50	+ 13	− 4	− 11	+ 63	+ 98	+112	+ 99	+ 94	+ 82	+ 33	+ 26	+ 24	+ 52
6 50	+ 25	− 25	+ 15	+ 99	+ 60	+ 67	+101	+113	+128	+ 75	+ 24	+ 31	+ 59
7 50	+ 54	− 7	+ 62	+ 35	− 5	+ 5	+ 6	+ 38	+ 42	+ 60	+ 12	+ 50	+ 29
8 50	+ 48	+ 17	+ 75	− 41	− 77	− 88	− 88	− 65	− 59	− 23	− 21	− 16	− 28
9 50	− 16	+ 11	+ 29	−131	−140	−178	−149	−148	−146	− 95	− 76	−155	− 99
10 50	− 78	− 17	− 15	−162	−160	−206	−151	−198	−208	−117	− 67	−136	−126
11 50	−106	− 7	− 72	−138	−171	−153	−123	−188	−203	− 88	− 7	− 40	−108
12 50	− 52	+ 22	− 71	− 68	−103	− 31	− 76	−110	− 95	− 25	+ 51	+ 45	− 47
13 50	− 18	+ 25	− 17	− 7	− 23	− 5	− 33	− 7	− 18	+ 16	+ 48	+ 81	+ 3
14 50	− 5	+ 36	+ 10	+ 28	+ 41	+ 35	+ 5	+ 53	+ 15	+ 34	+ 30	+ 83	+ 30
15 50	+ 10	+ 28	+ 2	+ 50	+ 71	+ 18	+ 18	+ 79	+ 22	+ 22	+ 6	+ 61	+ 32
16 50	+ 16	− 2	− 5	+ 29	+ 44	+ 19	+ 26	+ 59	+ 4	− 14	− 20	+ 5	+ 13
17 50	+ 9	− 19	+ 7	+ 3	+ 1	+ 7	+ 10	+ 6	− 1	− 22	− 14	+ 6	− 1
18 50	+ 15	− 29	− 17	− 7	− 6	+ 4	0	− 6	+ 2	− 15	− 8	+ 2	− 5
19 50	+ 11	− 23	− 14	− 4	+ 14	+ 12	+ 7	+ 5	+ 5	− 10	− 20	− 3	− 2
20 50	− 4	− 34	− 2	+ 6	+ 20	+ 24	+ 25	+ 15	+ 25	− 4	− 21	− 17	+ 3
21 50	0	− 41	+ 8	+ 14	+ 33	+ 30	+ 38	+ 26	+ 29	+ 1	− 20	− 21	+ 8
22 50	− 1	− 42	+ 14	+ 19	+ 46	+ 34	+ 44	+ 32	+ 35	+ 5	− 23	− 23	+ 12
23 50	− 5	− 36	+ 17	+ 23	+ 39	+ 33	+ 40	+ 36	+ 37	+ 8	− 25	− 29	+ 11
Range ..	160	85	147	261	269	318	252	311	336	192	127	238	185

TABLE IX*b*.—*Showing for the quiet days selected locally, the mean diurnal inequality of Vertical Force for each month of the year and for the whole year 1912.*

Unity = 0·1γ = 0·000001 C. G. S.

1912. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 50	+ 1	+ 5	+ 24	+ 72	+ 56	+ 47	+ 48	+ 39	+ 50	+ 13	+ 14	+ 2	+ 31
0 50	− 7	+ 11	+ 20	+ 64	+ 52	+ 41	+ 42	+ 37	+ 53	+ 12	+ 4	− 3	+ 27
1 50	− 17	+ 14	+ 13	+ 57	+ 49	+ 42	+ 40	+ 38	+ 52	+ 18	+ 6	− 6	+ 25
2 50	− 22	+ 5	+ 11	+ 53	+ 50	+ 33	+ 38	+ 38	+ 50	+ 14	+ 4	− 12	+ 22
3 50	− 18	+ 3	+ 11	+ 44	+ 56	+ 35	+ 44	+ 37	+ 44	+ 16	− 1	− 17	+ 21
4 50	− 21	+ 9	+ 12	+ 52	+ 73	+ 51	+ 60	+ 45	+ 49	+ 15	+ 6	− 14	+ 28
5 50	− 17	+ 16	+ 25	+ 80	+132	+105	+114	+106	+ 62	+ 28	+ 3	− 9	+ 54
6 50	− 4	+ 31	+ 44	+120	+121	+ 97	+104	+ 78	+112	+ 75	+ 19	− 35	+ 63
7 50	+ 12	+ 31	+ 62	+ 55	+ 51	+ 55	+ 55	+ 1	+ 23	+ 65	+ 39	+ 12	+ 38
8 50	− 1	− 14	+ 41	− 22	− 54	− 59	− 47	−116	− 83	− 14	+ 18	+ 36	− 26
9 50	− 77	−122	− 31	−102	−149	−125	−150	−181	−124	− 92	− 22	+ 11	− 97
10 50	−114	−157	−119	−158	−183	−201	−178	−199	−152	−143	− 25	+ 35	−133
11 50	− 48	−118	−177	−174	−157	−169	−134	−127	−164	−119	+ 4	+ 30	−113
12 50	+ 56	− 43	−154	−120	−100	−106	− 98	− 89	− 93	− 37	+ 15	+ 22	− 63
13 50	+111	+ 22	− 57	− 63	− 33	− 43	− 43	− 5	− 22	+ 18	− 9	+ 4	− 10
14 50	+114	+ 71	+ 33	0	+ 27	+ 22	+ 11	+ 41	+ 45	+ 28	− 23	− 30	+ 28
15 50	+ 76	+ 68	+ 61	+ 22	+ 53	+ 56	+ 63	+ 69	+ 50	+ 14	− 27	− 20	+ 40
16 50	+ 7	+ 22	+ 48	+ 36	+ 34	+ 56	+ 51	+ 63	+ 11	− 16	− 4	+ 6	+ 26
17 50	+ 5	+ 5	+ 23	+ 1	− 11	+ 26	+ 10	+ 35	− 21	− 6	0	+ 9	+ 6
18 50	+ 15	+ 18	+ 14	− 8	− 33	+ 4	− 24	+ 2	− 25	0	− 6	+ 4	− 3
19 50	+ 3	+ 21	+ 19	− 11	− 24	− 4	− 11	+ 7	− 12	+ 10	− 4	+ 3	0
20 50	− 6	+ 21	+ 24	+ 2	− 9	+ 6	− 1	+ 19	− 3	+ 25	− 4	− 2	+ 6
21 50	− 15	+ 27	+ 27	+ 11	+ 7	+ 16	+ 6	+ 24	+ 4	+ 32	− 4	− 6	+ 11
22 50	− 16	+ 30	+ 30	+ 13	+ 18	+ 19	+ 15	+ 31	+ 11	+ 36	+ 1	− 7	+ 15
23 50	− 26	+ 33	+ 30	+ 14	+ 18	+ 22	+ 12	+ 33	+ 12	+ 36	− 1	− 11	+ 14
Range	228	228	239	294	315	306	292	305	276	218	66	71	196

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TABLE IXc.—*Showing for the quiet days selected locally the mean diurnal inequality of Vertical Force for each month of the year, and for the whole year 1913.*

Unity = 0·1γ 0·000001 C. G. S.

1913. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	− 16	+ 31	+ 14	+ 42	+ 38	+ 44	+ 26	+ 17	+ 28	+ 20	+ 9	+ 15	+ 22
0 51	− 13	+ 27	+ 9	+ 37	+ 32	+ 46	+ 27	+ 26	+ 29	+ 15	+ 5	+ 6	+ 20
1 51	− 17	+ 24	+ 5	+ 38	+ 28	+ 43	+ 26	+ 24	+ 30	+ 10	+ 1	− 3	+ 17
2 51	− 17	+ 18	+ 1	+ 34	+ 26	+ 43	+ 23	+ 24	+ 32	+ 11	− 1	− 5	+ 16
3 51	− 9	+ 7	− 5	+ 28	+ 23	+ 47	+ 22	+ 24	+ 36	+ 11	− 6	− 9	+ 14
4 51	− 13	+ 4	− 5	+ 35	+ 38	+ 60	+ 33	+ 34	+ 49	+ 20	− 3	− 10	+ 20
5 51	− 18	+ 5	− 4	+ 65	+ 86	+121	+ 80	+ 78	+ 98	+ 39	− 6	− 19	+ 44
6 51	− 20	+ 7	+ 41	+101	+ 46	+ 94	+ 83	+ 99	+104	+100	0	− 33	+ 52
7 51	+ 42	+ 23	+ 66	+ 29	− 62	+ 19	+ 49	+ 10	− 22	+ 52	+ 7	+ 7	+ 18
8 51	+ 20	+ 28	+ 34	− 72	−155	− 98	− 56	−119	−159	− 79	− 35	+ 31	− 55
9 51	− 94	− 9	− 38	−137	−246	−174	−100	−138	−192	−138	− 70	+ 31	−109
10 51	−114	− 31	− 58	−182	−195	−181	−118	−135	−193	−173	− 62	+ 26	−118
11 51	−119	− 63	− 70	−167	−128	−152	−118	−113	−127	−127	+ 2	+ 15	− 97
12 51	− 77	− 27	− 15	− 90	− 67	− 81	− 84	− 54	− 19	− 53	+ 44	+ 14	− 42
13 51	− 30	− 24	+ 10	− 35	+ 47	− 6	− 25	+ 3	+ 29	+ 24	+ 44	+ 20	+ 5
14 51	+ 28	− 32	+ 25	+ 44	+ 96	+ 35	+ 41	+ 39	+ 62	+ 60	+ 7	+ 13	+ 35
15 51	+ 64	− 20	+ 1	+ 73	+115	+ 64	+ 62	+ 49	+ 78	+ 64	+ 6	+ 13	+ 47
16 51	+ 52	+ 2	− 20	+ 54	+ 84	+ 42	+ 52	+ 54	+ 41	+ 21	+ 10	− 6	+ 32
17 51	+ 47	+ 8	− 5	+ 11	+ 26	+ 10	− 3	+ 8	+ 5	+ 7	+ 16	− 5	+ 10
18 51	+ 55	+ 7	− 13	+ 3	+ 11	− 22	− 27	− 3	+ 1	+ 16	+ 16	− 12	+ 3
19 51	+ 57	+ 7	− 7	+ 9	+ 20	− 6	− 13	− 2	+ 12	+ 23	+ 15	− 11	+ 9
20 51	+ 49	+ 7	+ 5	+ 17	+ 33	+ 12	− 2	+ 12	+ 22	+ 7	+ 8	− 15	+ 13
21 51	+ 49	+ 4	+ 11	+ 33	+ 41	+ 20	+ 9	+ 23	+ 27	+ 23	+ 2	− 21	+ 18
22 51	+ 52	+ 13	+ 19	+ 38	+ 51	+ 26	+ 18	+ 26	+ 33	+ 29	+ 2	− 20	+ 24
23 51	+ 48	+ 11	+ 21	+ 37	+ 51	+ 25	+ 17	+ 33	+ 34	+ 26	0	− 25	+ 23
Range ..	183	94	136	283	361	302	201	237	297	273	114	64	170

TABLE IXd.—*Showing for the quiet days selected locally the mean diurnal inequality of Vertical Force for each month of the year, and for the whole year 1914.*

Unity 0·1γ 0·000001 C. G. S.

1914. Bombay Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	+ 12	+ 17	+ 10	+ 61	+ 25	+ 20	+ 48	+ 21	+ 50	+ 8	+ 17	+ 22	+ 26
0 51	+ 13	+ 11	+ 2	+ 47	+ 23	+ 19	+ 48	+ 19	+ 45	+ 10	+ 12	+ 35	+ 24
1 51	+ 5	+ 4	+ 4	+ 37	+ 22	+ 16	+ 45	+ 20	+ 48	+ 8	+ 17	+ 30	+ 21
2 51	− 1	+ 5	+ 7	+ 37	+ 19	+ 12	+ 40	+ 13	+ 51	+ 10	+ 17	+ 23	+ 19
3 51	− 2	− 1	+ 4	+ 40	+ 23	+ 8	+ 38	+ 15	+ 59	+ 15	+ 15	+ 17	+ 19
4 51	− 2	+ 1	+ 18	+ 30	+ 48	+ 21	+ 51	+ 33	+ 69	+ 21	+ 14	+ 19	+ 27
5 51	− 5	− 4	+ 26	+ 61	+104	+ 67	+104	+ 94	+120	+ 43	+ 22	+ 20	+ 54
6 51	− 16	− 5	+ 47	+107	+110	+ 68	+ 97	+ 84	+143	+106	+ 47	+ 5	+ 66
7 51	− 22	− 8	+ 42	+ 65	+ 40	+ 28	+ 34	− 4	+ 33	+ 76	+ 37	+ 53	+ 31
8 51	− 21	− 23	+ 2	− 4	− 72	− 73	− 52	−149	−137	− 46	− 6	+ 77	− 42
9 51	− 39	− 95	− 23	−133	−165	−148	−134	−265	−215	−177	− 68	+ 30	−119
10 51	− 90	− 92	− 78	−212	−221	−165	−128	−262	−211	−203	−114	0	−148
11 51	− 54	− 28	−128	−184	−184	−131	−116	−231	−163	−173	− 48	− 42	−123
12 51	+ 12	+ 53	−100	−107	− 92	− 55	− 71	−106	− 52	− 41	+ 20	− 61	− 50
13 51	+ 64	+ 78	− 31	− 29	− 17	+ 6	− 35	− 3	+ 37	+ 24	+ 27	− 57	+ 5
14 51	+ 75	+ 78	+ 32	+ 42	+ 30	+ 48	− 18	+ 91	+ 91	+ 78	+ 21	− 49	+ 43
15 51	+ 74	+ 36	+ 29	+ 54	+ 65	+ 73	+ 21	+131	+ 76	+ 58	+ 9	− 32	+ 49
16 51	+ 18	− 11	− 1	+ 27	+ 54	+ 52	+ 42	+117	+ 18	+ 5	− 6	− 11	+ 25
17 51	− 1	− 21	+ 6	− 10	+ 35	+ 25	+ 18	+ 48	− 32	− 2	− 5	− 1	+ 5
18 51	+ 1	+ 4	+ 1	− 4	+ 6	+ 5	− 19	+ 28	− 22	+ 10	− 6	− 5	0
19 51	+ 5	+ 2	+ 13	+ 6	+ 14	+ 8	− 4	+ 53	− 13	+ 21	− 3	− 5	+ 8
20 51	+ 1	+ 1	+ 30	+ 25	+ 27	+ 15	0	+ 64	0	+ 34	− 3	− 15	+ 15
21 51	− 5	− 1	+ 30	+ 30	+ 36	+ 29	+ 4	+ 74	+ 6	+ 42	− 8	− 17	+ 18
22 51	− 8	+ 1	+ 40	+ 34	+ 43	+ 39	+ 15	+ 82	+ 15	+ 48	− 1	− 18	+ 24
23 51	− 9	+ 2	+ 33	+ 37	+ 46	+ 38	+ 15	+ 86	+ 17	+ 54	− 1	− 21	+ 25
Range.	165	173	175	319	331	238	238	396	358	309	161	138	214

TABLE IXe.—*Showing for the quiet days selected locally, the mean diurnal inequality of Vertical Force for each month of the year and for the whole year 1915.*

Unity = 0·1γ = 0·000001 C. G. S.

1915. Bombay Civil Time.	Month. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
H. m.													
23 51	+ 13	+ 46	+ 19	+ 57	+ 40	+ 26	+ 41	+ 64	+ 56	+ 37	− 10	− 9	+ 32
0 51	+ 10	+ 44	+ 19	+ 54	+ 37	+ 12	+ 36	+ 70	+ 62	+ 33	− 14	− 15	+ 29
1 51	+ 5	+ 36	+ 20	+ 51	+ 35	+ 11	+ 33	+ 63	+ 56	+ 35	− 22	− 22	+ 25
2 51	0	+ 32	+ 19	+ 49	+ 36	+ 12	+ 33	+ 66	+ 59	+ 29	− 27	− 27	+ 23
3 51	+ 5	+ 31	+ 25	+ 49	+ 45	+ 11	+ 33	+ 57	+ 58	+ 19	− 30	− 21	+ 23
4 51	+ 5	+ 29	+ 33	+ 57	+ 64	+ 32	+ 40	+ 69	+ 67	+ 31	− 26	− 11	+ 32
5 51	+ 5	+ 42	+ 50	+ 87	+108	+ 71	+119	+111	+126	+ 62	− 17	+ 7	+ 64
6 51	+ 2	+ 42	+ 79	+107	+ 68	+ 74	+ 94	+137	+125	+112	− 22	+ 29	+ 71
7 51	+ 40	+ 5	+ 71	+ 44	− 22	− 3	− 11	+ 42	− 15	+ 24	− 54	+ 52	+ 14
8 51	+ 44	− 44	− 19	− 62	−109	−124	−191	− 61	−189	− 84	− 87	+ 17	− 76
9 51	− 41	−103	− 99	−180	−181	−218	−282	−143	−288	−151	− 94	− 69	−154
10 51	− 84	−140	−185	−261	−160	−244	−242	−125	−278	−170	− 70	−115	−173
11 51	− 44	−104	−192	−251	−136	−193	−126	−107	−221	−143	− 5	− 74	−133
12 51	+ 18	− 5	−127	−146	− 57	−104	− 73	− 49	−112	− 38	+ 78	+ 6	− 51
13 51	+ 4	+ 69	− 27	− 24	+ 6	+ 14	− 10	− 18	+ 16	+ 38	+110	+ 20	+ 16
14 51	+ 12	+ 94	+ 55	+ 47	+ 62	+ 73	+ 66	− 11	+ 92	+ 56	+ 90	+ 29	+ 55
15 51	+ 11	+ 70	+ 49	+ 62	+ 69	+ 90	+115	− 9	+101	+ 38	+ 47	+ 33	+ 56
16 51	− 17	− 21	+ 10	+ 43	+ 35	+ 76	+113	+ 13	+ 53	− 28	− 12	+ 10	+ 23
17 51	− 13	− 45	− 5	+ 35	− 9	+ 46	+ 66	− 9	+ 4	− 33	+ 7	+ 23	+ 6
18 51	+ 7	− 13	+ 12	+ 16	− 23	+ 29	+ 15	− 51	+ 25	+ 1	+ 18	+ 31	+ 6
19 51	+ 10	− 12	+ 30	+ 19	+ 3	+ 50	+ 18	− 49	+ 38	+ 5	+ 15	+ 22	+ 12
20 51	+ 6	− 21	+ 29	+ 42	+ 20	+ 66	+ 28	− 27	+ 47	+ 18	+ 15	+ 20	+ 20
21 51	+ 8	− 12	+ 42	+ 51	+ 35	+ 75	+ 38	− 8	+ 55	+ 42	+ 39	+ 25	+ 32
22 51	+ 6	+ 6	+ 58	+ 62	+ 35	+ 82	+ 43	+ 3	+ 64	+ 62	+ 44	+ 28	+ 41
23 51	+ 3	+ 4	+ 62	+ 63	+ 34	+ 82	+ 47	+ 11	+ 70	+ 65	+ 45	+ 23	+ 42
Range ..	128	234	271	368	289	334	401	280	414	282	204	167	244

TABLE IXf.—*Showing for the quiet days locally selected the mean diurnal inequality of Vertical Force, for the summer months (April to September), winter months (October to March), and for the whole year, for each of the years 1911 to 1915.*

Unity = 0·1γ = 0·000001 C. G. S.

Bombay Civil Time.	1911. April to September.	October to March.	Year.	1912. April to September.	October to March.	Year.	1913. April to September.	October to March.	Year.	1914. April to September.	October to March.	Year.	1915. April to September.	October to March.	Year.
H. m.															
0 ..	+ 51	+ 26	+ 39	+ 52	+ 10	+ 31	+ 32	+ 12	+ 22	+ 37	+ 14	+ 2[illegible]	+ 47	+ 16	+ 32
1 ..	+ 50	+ 22	+ 36	+ 48	+ 6	+ 27	+ 33	+ 8	+ 20	+ 33	+ 14	+ 24	+ 45	+ 13	+ 29
2 ..	+ 46	+ 18	+ 32	+ 46	+ 5	+ 25	+ 31	+ 3	+ 17	+ 31	+ 11	+ 21	+ 41	+ 9	+ 25
3 ..	+ 41	+ 12	+ 27	+ 44	0	+ 22	+ 30	+ 1	+ 16	+ 29	+ 10	+ 19	+ 42	+ 4	+ 23
4 ..	+ 39	+ 9	+ 24	+ 43	− 1	+ 21	+ 30	− 2	+ 14	+ 30	+ 8	+ 19	+ 42	+ 5	+ 23
5 ..	+ 50	+ 11	+ 30	+ 55	+ 1	+ 28	+ 41	− 1	+ 20	+ 42	+ 12	+ 27	+ 55	+ 10	+ 32
6 ..	+ 91	+ 13	+ 52	+100	+ 8	+ 54	+ 88	0	+ 44	+ 92	+ 17	+ 54	+104	+ 25	+ 64
7 ..	+ 95	+ 24	+ 59	+105	+ 22	+ 63	+ 88	+ 16	+ 52	+101	+ 31	+ 66	+101	+ 40	+ 71
8 ..	+ 20	+ 38	+ 29	+ 40	+ 37	+ 38	+ 4	+ 33	+ 18	+ 33	+ 30	+ 31	+ 6	+ 23	+ 14
9 ..	− 70	+ 13	− 28	− 63	+ 11	− 26	−110	0	− 55	− 81	− 3	− 42	−123	− 29	− 76
10 ..	−149	− 50	− 99	−138	− 55	− 97	−164	− 53	−109	−177	− 62	−119	−215	− 93	−154
11 ..	−181	− 72	−126	+178	− 87	−133	−167	− 69	−118	−200	− 96	−148	−218	−127	−173
12 ..	−163	− 53	−108	−154	− 71	−113	−134	− 60	− 97	−168	− 79	−123	−172	− 94	−133
13 ..	− 89	− 5	− 47	−101	− 24	− 63	− 66	− 19	− 42	− 80	− 19	− 50	− 90	− 11	− 51
14 ..	− 15	+ 22	+ 3	− 35	+ 15	− 10	+ 2	+ 7	+ 5	− 7	+ 17	+ 5	− 4	+ 36	+ 16
15 ..	+ 29	+ 31	+ 30	+ 24	+ 32	+ 28	+ 53	+ 17	+ 35	+ 47	+ 39	+ 43	+ 55	+ 56	+ 55
16 ..	+ 43	+ 21	+ 32	+ 52	+ 29	+ 40	+ 73	+ 21	+ 47	+ 70	+ 29	+ 49	+ 71	+ 41	+ 56
17 ..	+ 30	− 3	+ 13	+ 42	+ 10	+ 26	+ 54	+ 10	+ 32	+ 52	− 1	+ 25	+ 55	− 10	+ 23
18 ..	+ 4	− 5	− 1	+ 7	+ 6	+ 6	+ 9	+ 11	+ 10	+ 14	− 4	+ 5	+ 22	− 11	+ 6
19 ..	− 2	− 9	− 5	− 14	+ 7	− 3	− 6	+ 11	+ 3	− 1	+ 1	0	+ 2	+ 9	+ 6
20 ..	+ 6	− 10	− 2	− 9	+ 9	0	+ 3	+ 14	+ 9	+ 11	+ 5	+ 8	+ 13	+ 12	+ 12
21 ..	+ 19	− 14	+ 3	+ 2	+ 10	+ 6	+ 16	+ 10	+ 13	+ 22	+ 8	+ 15	+ 29	+ 11	+ 20
22 ..	+ 28	− 12	+ 8	+ 11	+ 10	+ 11	+ 25	+ 11	+ 18	+ 30	+ 7	+ 18	+ 41	+ 24	+ 32
23 ..	+ 35	− 12	+ 12	+ 18	+ 12	+ 15	+ 32	+ 16	+ 24	+ 38	+ 10	+ 24	+ 48	+ 34	+ 41
24 ..	+ 35	− 12	+ 11	+ 18	+ 10	+ 14	+ 33	+ 13	+ 23	+ 40	+ 10	+ 25	+ 51	+ 34	+ 42
Range ..	259	110	185	283	124	196	255	102	170	301	135	214	322	183	244

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on 01 February, 2020